Armored Fist 3

OPERATOR'S MANUAL

ARMORED FIST 3

THE DEFINITIVE M1A2® ABRAMS® BATTLE SIMULATION

Armored Fist 3

USER MANUAL

TABLE OF CONTENTS

Credits

Programmed by
Sherwood "Kent" Simon

Menu Programming
LoQuan Seh
Vu Truong

Tools Programming
Mark Maestas
Scott Ray

**Voxel Space
and Imaging Engine**
Kyle Freeman

**NovaWorld and
Voice-over-net
Programming**
John Bojorquez

Additional Programming
Randy Casey
Mark Davis
David King
Robert Mobbs
Jim Ratcliff

**Additional Novaworld
Programming**
Isaac Foraker

Executive Producer
John Garcia

Producer
David Seeholzer

Associate Producer
Nigel Mills

Technical Management
John Butrovich

*

Art Director
Keith Rust

Art Lead
Jax Carroll

Art
John Brophy
Brent Houston
Jason Monroe
Rod Parong
Chris Tamburrino
Jon Tando
Jason Tull
Tyrone Woodland

Additional Art
Tim Higgins
Craig Marschke
Keith Rust

Logo Animations
Dean Fowler

Tank Photography
David Bohrer

*

Mission Design Manager
Alicia Taylor

Mission Design Lead
Jerome K. Jones

Mission Design
Jason Bender
Will Emery
David Merrick
Christopher Stockman

Mission Briefings
Lukas Mandrake

Audio Director
Tom Hays

*

**Sound Effects
and Music**
Rich Adrian
Greg deBeer
Tom Hays
Phil Kovats
Eric Kuehnl

**Additional
Dialog Editing**
Greg Freeman
Jeff Palmer

Additional Music
Rik Schaffer

Voices
Jay C. Boone
Will Emery
Oscar L. Galvin
Andy Inkogle
Paul Inkogle
Jerome K. Jones
Major Keith D. Lochner
Daniel Poole
Sherwood "Kent" Simon
CW2 Jaimie Tardiff
Paul Wade
James Wood

Video Editing Producer
Caroline Thomas

**Video Editing
Assoc. Producer**
Dawn Tomanek

Video Editing
Travis Miller
Anthony Wilderman

Manual Written by
Kevin R. O'Hara

Packaging Layout
and Design
Ulises Gerardo

Manual Layout
and Design
Deanna Dolph

*

Motion Capture
Provided by
hOuse of mOves
Los Angeles, CA

Exec. in Charge of
Motion Capture
Tom Tolles

Executive Producer,
Motion Capture
Jarrod Phillips

Chief Technology
Officer, Motion Capture
Taylor Wilson

Technical Director,
Motion Capture
Brett Gassaway

Production Manager,
Motion Capture
Chris Bellaci

Line Producer,
Motion Capture
Line Spencer

Motion Capture Director
James Scanlon

Motion Capture Artist
David "Dario" Ahdoot

Motion Capture
Technicians
Daven Coburn
Johnny Ravena

Motion Capture Actor
Marcus Young

Motion Capture
Stunt Coordinator
Vincent Mazzela

Motion Capture
Storyboard Artist
Chauncy Pierce

Quality Assurance
Manager
Jeff Moore

QA Coordinator
Jeremiah Maza

Quality Assurance
James Altenburg
Ron Amaral
Brian Bekian
Dan Constant
Chris Hansen
Mike Harling
Jeremy Rosenthal
Matthew Young

Computer Maintenance
Glenn Kronick

*

Special Thanks
Dan Bennet
Wes Eckhart
Les Fullen
Patrick Hewitt
Major Jeff Iddins
Jeff Jones
James Lamorticelli
Jackie Lay
Jillian Leonard
Lee Milligan

Dorothy Peters
Marlyn Pierce
David Pollack
Steve Sandwisch
Irving A. Simon
Lt. General Robert Springer, USAF-ret
Tara Stivers
Major David Taylor
Rozita Tolouey
Keri Uejo
Paul Wade
Paul Walkden
Sgt. Trent Witte, USMC
Karly Young
Camp Pendleton US Marine Corps Base
Camp Carson US Army Base

Special thanks to the U.S. Marine Corps, U.S. Marine Corps Public Affairs Office, Los Angeles California and Marine Corps personnel at Camp Pendleton, CA.

We gratefully acknowledge the cooperation of the Department of Defense, the Department of the Army and specifically Office of the Chief of Public Affairs, Los Angeles Branch, Advertising and Public Affairs Directorate, U.S. Army Recruiting Command, Fort Knox, Kentucky.

NOVALOGIC'S LIMITED NINETY-DAY WARRANTY AND LICENSE PROVISIONS

IMPORTANT: By breaking the seal on the software, you agree to be irrevocably bound to the following terms and conditions. If you do not wish to be bound, promptly return this product in its entirety with the software seal intact and proof of purchase to NovaLogic, Inc., 26010 Mureau Road, Suite 200, Calabasas, California 91302, and a full refund will be made.

LIMITED WARRANTY ON MEDIA

NovaLogic, Inc. ("NovaLogic") warrants the compact disc on which this product is recorded to be free from reasonable defects in materials and workmanship under normal use for a period of ninety (90) days from the date of purchase as evidenced by a copy of your proof of purchase. NovaLogic's entire liability and your exclusive remedy in the event of such defect will be replacement of the compact disc not meeting NovaLogic's limited warranty and which is returned to NovaLogic with a copy of your proof of purchase. NovaLogic will have no responsibility to replace any such compact disc damaged by accident, abuse or misapplication.

This policy applies to the initial purchase only.

ANY IMPLIED WARRANTIES ON THE COMPACT DISC, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO NINETY (90) DAYS FROM THE DATE OF DELIVERY. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY BY JURISDICTION.

If you and the NovaLogic Tech Support Staff believe you have found any such error or defect during the warranty period please return the defective compact disc together with a dated proof of purchase to NovaLogic, Inc., 26010 Mureau Road, Suite 200, Calabasas, California 91302, for a free replacement.

DISCLAIMER OF WARRANTY ON PRODUCT

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT USE OF THIS PRODUCT IS AT YOUR SOLE RISK. THIS PRODUCT AND RELATED DOCUMENTATION ARE PROVIDED "AS IS" AND WITHOUT WARRANTY OF ANY KIND AND NOVALOGIC EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. UNAUTHORIZED REPRESENTATIONS: NOVALOGIC WARRANTS ONLY THAT THE PROGRAM WILL PERFORM AS DESCRIBED IN THE USER DOCUMENTATION. NO ADVERTISING, DESCRIPTION OR REPRESENTATION, WHETHER MADE BY A NOVALOGIC DEALER, DISTRIBUTOR, AGENT OR EMPLOYEE, SHALL BE BINDING UPON NOVALOGIC OR SHALL CHANGE THE TERMS OF THIS DISCLAIMER OR THE LIMITED WARRANTY ON MEDIA SET FORTH ABOVE. NOVALOGIC DOES NOT WARRANT THAT THE FUNCTIONS CONTAINED IN THE NOVALOGIC PRODUCT WILL MEET YOUR REQUIREMENTS, OR THAT THE OPERATION OF THE NOVALOGIC PRODUCT WILL BE UNINTERRUPTED OR ERROR-FREE, OR THAT DEFECTS IN THE PRODUCT WILL BE CORRECTED. FURTHERMORE NOVALOGIC DOES NOT WARRANT OR MAKE ANY REPRESENTATIONS REGARDING THE USE OR THE RESULTS OF THE USE OF THE PRODUCT OR RELATED DOCUMENTATION IN TERMS OF THEIR CORRECTNESS, ACCURACY, RELIABILITY, OR OTHERWISE. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY NOVALOGIC OR NOVALOGIC'S AUTHORIZED REPRESENTATIVE SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY. SHOULD THE PRODUCT PROVE DEFECTIVE, YOU (AND NOT NOVALOGIC) ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.

NO CONSEQUENTIAL DAMAGES: NOVALOGIC SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL,CONSEQUENTIAL OR OTHER DAMAGES, EVEN IF NOVALOGIC IS ADVISED OF OR AWARE OF THE POSSIBILITY OF SUCH DAMAGES. THIS MEANS THAT NOVALOGIC SHALL NOT BE RESPONSIBLE OR LIABLE FOR LOST PROFITS OR REVENUES, OR FOR DAMAGES OR COSTS INCURRED AS A RESULT OF LOSS OF TIME, DATA OR USE OF THE SOFTWARE, OR FROM ANY OTHER CAUSE EXCEPT THE ACTUAL COST OF THE PRODUCT. IN NO EVENT SHALL NOVALOGIC'S LIABILITY EXCEED THE PURCHASE PRICE OF THIS PRODUCT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

LICENSE

NovaLogic grants you a nonexclusive, nontransferable license as follows. You are entitled to use this product for your own use, but may not make (except for backup), sell or transfer reproductions of the software or manual to other parties in any way, nor rent, lease, or preview the product to others without the prior written permission of NovaLogic. You may use one copy of the product on a single terminal connected to one particular computer. You may not reverse engineer, disassemble, or translate the product. Additionaly, you are expressly prohibited from redistributing the BinkPlay.exe. If you would like to redistribute the BinkPlay.exe program, please contact RAD at +1 (425) 893-4300 about acquiring a redistribution license.

NovaLogic Technical Support

The entire staff at NovaLogic, Inc. thanks you for purchasing Armored Fist 3. NovaLogic is committed to creating quality entertainment software that pushes the technological envelope. However, this commitment doesn't end when you purchase our games - it's only just begun. NovaLogic's technical support staff is ready to assist you. When contacting us, please detail your hardware set-up and be as specific as possible regarding any problems you may be experiencing.

INTERNET WEBSITE: http://www.novalogic.com

Visit the NovaLogic website for up-to-the-minute information, frequently asked questions, game updates, previews of upcoming products and screen shots as well as the latest on NovaWorld, our large scale multiplayer gaming service. A list of compatible sound cards can be found on the NovaLogic website.

EMAIL SUPPORT ADDRESS: support@novalogic.com

You may also email your questions and comments to a member of technical support at any time. To better assist you, please detail your hardware set-up and be as specific as possible regarding any problems you may be experiencing. If possible, provide a contact number which you can be telephoned at.

TECHNICAL SUPPORT LINE: (818) 878-0325

If you need to speak to someone directly, our technical support staff can be reached during normal business hours (Monday through Friday 9AM to 5PM Pacific Time). To better assist you, our technical support staff member is likely to ask questions regarding your specific hardware setup. Have this information handy. Also, be prepared to explain the exact nature of any problems you are experiencing. For example, write down the exact wording of any on-screen error messages you may be receiving.
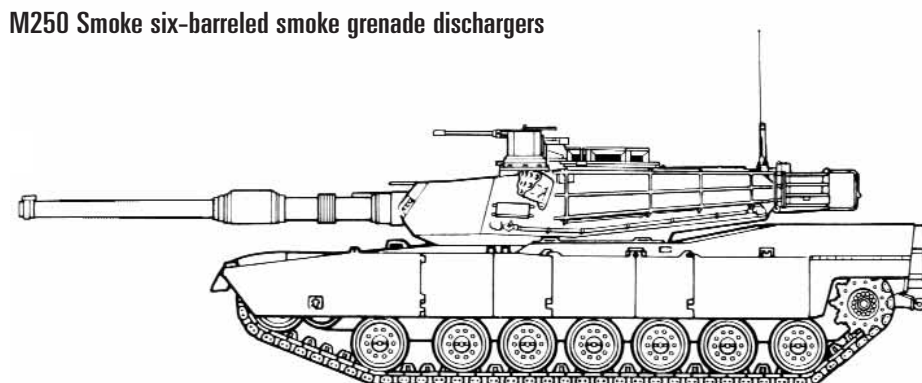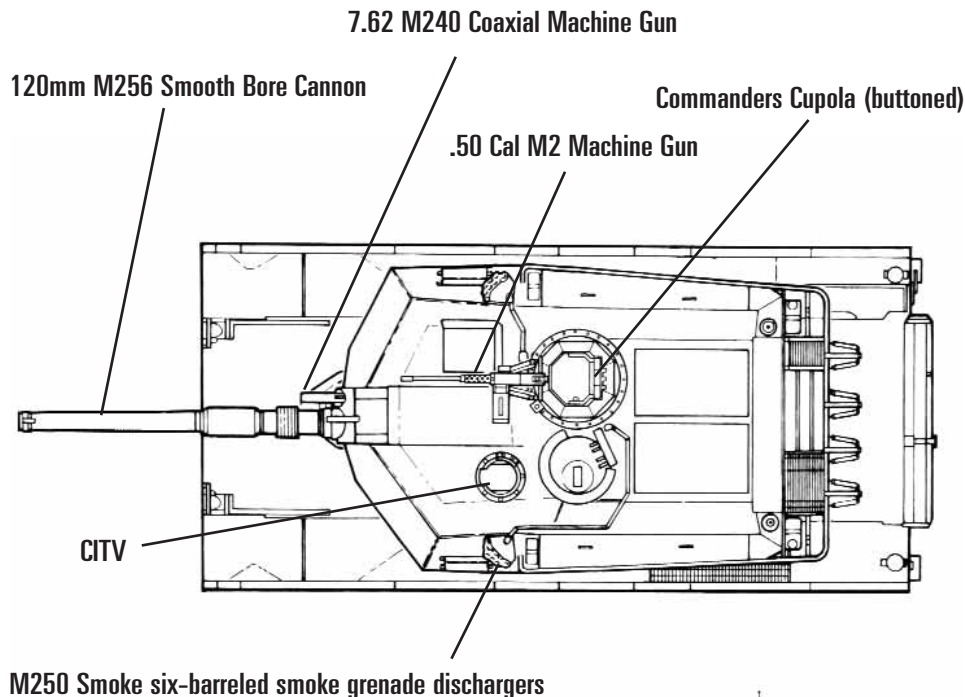
FAX SUPPORT LINE: (818) 880-3448

You may fax your questions or comments to a member of technical support at any time day or night. Be as specific as possible regarding your hardware setup and any problems you may be experiencing.

Schematics

MIA2 ABRAMS

Developer: General Dynamics Land Systems
Crew: 4 Personnel
Weight: 69.54 Tons
Length (Gun Forward): 387 Inches (983 Centimeters)
Turret Height: 93.5 Inches (237.5 Centimeters)
Width: 144 Inches (365.8 Centimeters)
Ground Clearance: 19 inches (48.3 Centimeters)
Ground Pressure: 15.4 PSI
Steering: Hydraulic-mechanical steering control
Turning Capability: 360 degree pivot
Brakes: Hydraulic-mechanical service brake (foot)
Power to Weight Ratio: 21.6 hp/ton
Diesel Turbine Engine 1500 HP
Engine Type: dual-compressor, regenerative
Hydro Kinetic Transmission: 4 Speed Forward
2 Speed Reverse, with pivot and neutral selections
Maximum Speed: 42 mph (67 km/h) - Governed
Cross Country Speed: 30 mph (48 km/h)
Speed on 10% Slope: 17 mph (27 km/h)
Speed on 60% Slope: 4 mph (6 km/h)
Acceleration (0 to 20 mph): 7.2 Seconds
Maximum Reverse Speed: 25 mph (40 km/h)
Cruising Range: 265 Miles (426 Kilometers)
Vertical Obstacle: 42 Inches (106.7 Centimeters)
Trench Crossing: 9 Feet (2.74 Meters)
Main Gun: M256 120mm Smoothbore Cannon
120mm Ammunition Quantity: 40 rounds
7.62mm Coaxial Machine Gun: 10,000 rounds
Caliber .50 Machine Gun: 900 rounds
UKL8 series/M76IR Smoke Grenades: 24 grenades
NBC System 200 SCFM - Clean Cooled Air

7.62 M240 Coaxial Machine Gun

120mm M256 Smooth Bore Cannon

Commanders Cupola (buttoned)

.50 Cal M2 Machine Gun

CITV

M250 Smoke six-barreled smoke grenade dischargers

Introduction

NovaLogic would like to thank you for purchasing Armored Fist 3, the latest in our military simulation arsenal. It is our intention to bring you the thrill of commanding a platoon of unrivaled M1A2 Abrams tanks. The primary mission of the tank in warfare is to bring highly lethal shoot-on-the-move firepower to bear on the enemy. Designed for maximum survivability and resolute mobility, the tank has had a strong presence on the battlefield since World War 1. In the 1970s, development began on General Dynamics Land Systems Division M1 tank. With almost twenty years of production upgrades, the American-made M1A2 Abrams Main Battle Tank is one of the most sophisticated armored combat vehicles in the world.

Building upon the M1A1, the M1A2 provides significant upgrades including a larger cannon, CITV (Commander's Independent Thermal Viewer), IVIS (Inter-Vehicular Information System), and ICWS (Improved Commander's Weapon Station). Its highly classified armor offers protection for the hull and turret against even the most advanced battlefield weapons. Furthermore, the tank is well guarded against nuclear, biological and chemical (NBC) warfare.

The main armament for the tank is the M256, an improved 120mm smoothbore gun developed by Rheinmetall GmbH of Germany. The stabilization system permits accurate firing on the move. Machine guns provide 360 degrees of additional firepower for the crew of the M1A2. For defensive countermeasures, the M1A2 can lay down a thick smoke screen with its twin six-barreled smoke grenade dischargers or engine-fuel smoke generator.

In Armored Fist 3, you will have the first-hand challenge of operating the key stations in the four-man tank as well as the ability to strategically lead a four tank platoon or even an entire tank company into battle. To be an effective commander, you must know the capabilities and limitations of your vehicles and have the iron-willed determination to successfully carry out your mission orders.

In Armored Fist 3, you are given the option of playing in EASY or ADVANCED Sim Mode. Advanced mode uses more specialized controls for each station on the tank, where Easy mode automates and simplifies many aspects of tank control. The bulk of this manual is written for Advanced Mode. Callout boxes like this one will highlight special controls for Easy Mode.

Chapter 1: Install

Welcome to Armored Fist 3. In order to play Armored Fist 3, you must first install the game files onto your computer's hard drive. If you wish to use a joystick controller, you should also calibrate it before beginning play.

GAME INSTALLATION

The AutoRun program will automatically load itself and run each time you insert the Armored Fist 3 CD into your CD-ROM drive. Armored Fist 3 uses the InstallShield® to place the necessary files on your hard drive. Before you begin installing the game, close all programs that your computer may be currently running. The installation program requires all of your computer's resources. Then:

1) Place the game CD into your CD-ROM drive and close the drive door. The AutoRun program will now take over. If you have turned off the AutoRun feature or if the AutoRun fails to launch automatically, double-click on the "My Computer" icon on your desktop and then double-click on your computer's CD-ROM drive letter. This should launch the Armored Fist 3 AutoRun.

2) Click the mouse on one of the menu choices, or type the letter corresponding to the underlined hot key.
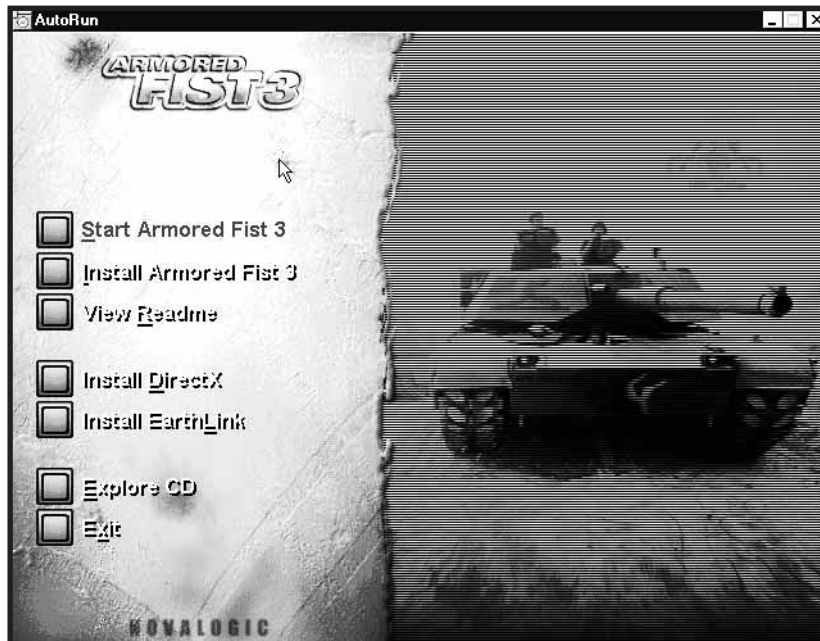
INSTALLING DIRECTX

Make this selection to install the latest version of DirectX™ onto your hard drive. You must have DirectX 3.0 or greater installed on your machine to play Armored Fist 3. Windows NT 4.0 requires Service Pack 3 or greater (obtained at the Microsoft Website) to play.

INSTALLING ARMORED FIST 3 GAME FILES

1) At the beginning of the installation program you are given the opportunity to select a destination folder for the game. A default is typed in the window for you. Press the ENTER key to select the default destination. Otherwise, select your own folder name. If the folder you specify does not already exist on your hard drive, the Install program will create it for you. Further installation instructions will appear onscreen.

2) If there is enough free hard drive space at the destination site, the program will copy the files from your Armored Fist 3 CD-ROM. An on-screen progress meter displays the completion percentage as the program transfers the files.

3) The install procedure automatically adds a NovaLogic folder to your Windows® 95/98 Start Menu under the PROGRAMS heading. The ARMORED FIST 3 sub-folder within the NovaLogic folder contains an application short-cut icon for the game.

4) If your Windows 95/98 system does not already have DirectX installed, you will need to install it now. Select INSTALL DIRECTX from the AutoRun program, then follow the on-screen instructions. You will need to restart your computer to activate DirectX before you can play Armored Fist 3.

STARTING THE GAME

If your computer is already turned on and the Armored Fist 3 CD is in the CD-ROM drive, go to the directory containing the game or Start Menu and double-click on the Armored Fist 3 program icon.

If your computer is on, but the program CD is not in the drive, insert the Armored Fist 3 CD into the drive and select START from the AutoRun screen. If no screen appears when you insert the CD, double-click on the "My Computer" icon on your desktop, then double-click on the icon for your computer's CD-ROM drive. You can then choose START from the AutoRun screen. You may also use your computer's FIND feature to locate and launch the program.

Enjoy playing Armored Fist 3!

Chapter 2: Quick Start

For those of you who want to jump right into the simulation, select Play Battle from the Main Menu. Choose any mission and click Accept with your mouse or type the underlined hotkey (A). We suggest you first try the Training Missions under Campaigns to better acquaint yourself with the tank. This quick tutorial assumes you have Sim Mode set to Easy (the default), whereas the rest of the manual is geared toward Advanced Sim Mode.

Press the PAUSE key to stop the simulation so you can familiarize yourself with the M1A2. Pressing this key again will put you back in the action. To exit the mission at any time, press ESCAPE.

VIEWS

Use the Function keys at the top of your keyboard to see the different views you can have of your M1A2 tank and its crew stations.

F1 Chase view outside the tank. Press again to widen the external view.

F2-F4 Gunner Station

F5-F8 Tank Commander Station

F9 Driver Station

From the Tank Commander's and Gunner's main station views (F2 and F5), you can zoom in on a sub-screen by clicking on it with the mouse or by pressing the corresponding Function key.

INFORMATION BAR

The Information Bar appears at the bottom of the screen regardless of which station you occupy. The left-hand portion is dedicated to text messages that inform you of important game details or that come from other players in a multiplayer game. The middle area contains valuable mission data, such as the name of the tank you occupy, your currently selected ammunition type and remaining rounds, your current speed in miles per hour, your tanks heading (0 represents north) and the time elapsed in the mission. It also shows your IVIS X and Y grid location, which is useful for coordinating tactics with other players. The small tank graphic in the right-hand side of this bar allows you to quickly see heading (the top of the box is north) and the orientation of the turret in relation to the rest of the tank.

S. Austin :I HAVE EYES ON TANKS	Eliminator	Speed:045mph	
	Objectives:020	Heading:258	
	Enmy T80	G:0947 0811	
	Sabot 020	00:59:32	

MOVING

In Easy Sim Mode, your joystick or ARROW keys on the keyboard will always control the direction and speed of your tank regardless of what view you are currently in. Press forward to accelerate forward, left and right to pivot in the respective direction and pull back to go in reverse.

Press F9 to get in the Driver's view. In the lower left-hand screen, you can see the speed of your tank in miles per hour. Notice how your maximum speed varies depending on the different slopes you drive on.

At the top of the screen, a red caret ^ will point in the direction of your next mission waypoint. In the distance you will see a yellow marker indicating the location and number of kilometers to your next waypoint. Generally it is a good idea to drive to all of your waypoints, as they are relevant to the mission objectives. The green marker indicates the next waypoint after your current one.

For night driving, you can switch to Thermal mode by pressing the ; (semicolon) key. Objects that emit heat will appear lighter green.

WARNING!
Hands could be crushed. Use caution when near sprocket or track while engine is running.

TARGETING & FIRING

Next go to your Tank Commander's view by pressing F5. The first thing you will want to do is review the IVIS display on the right-hand side of the screen. Click on it with the mouse or press F7 to see it full screen. Targets that you and your allies are aware of will appear on the map. Identified enemy units will appear as red icons. Allies will be displayed as blue icons. Targets that have been destroyed will change to black.

Note that your tank's hull always points to the top of this screen. Press the PLUS and MINUS keys on the keyboard to zoom in and out of the map.

After reviewing the IVIS, drive towards an enemy unit. Using your CITV (F6), try to target the enemy. Press button 2 on your joystick or the ENTER key to acquire the target. The target will now be centered in a red box. A large "X" will indicate that you are targeting a friendly unit; take care not to fire upon friendly targets. Press button 2 or the ENTER key again to find the next closest target. Pressing the joystick trigger or SPACEBAR will hand-off the target to the gunner, who will automatically aim and fire the cannon at it. By pressing the ~ (tilde) key, the cannon will attempt to stay pointing at the target regardless of which direction you drive the tank.

To manually aim the cannon or select ammunition, go to the Gunner's station by pressing F2. Use the joystick's hatswitch if it has one or the W, A, S, and D keys to aim the cannon. By hitting the F key, these controls will slow down for precise aiming.

The buttons near the center of the screen can be used to select which ammunition type you would like the loader to prepare. He will not actually load the ammunition until you have unloaded the current round by firing it. Use the switch below the ammunition area (or [and] keys) to magnify your view with the Gunner's Primary Sight (F3 key).

S. Austin :I HAVE EYES ON TANKS

Eliminator	Speed:045mph
Objectives:020	Heading:258
Enmy T80	G:0947 0811
Sabot 020	00:59:32

WARNING!
Operating vehicle in reverse is dangerous due to limited vision and reversed steering.

MACHINE GUNS

The coaxial machine gun points in the same direction as the 120mm cannon and can be fired by pressing the C key.

When you are in the Tank Commander's unbuttoned view (F8), your joystick's hatswitch (or W, A, S, D keys) will control the .50 caliber machine gun. In this screen, pressing the trigger (or the SPACEBAR) will fire the machine gun.

ENDING A MISSION

Once you have accomplished all of your goals, the mission will automatically end. If you fail to meet your goals when the time expires, or all of your tanks are destroyed, the end game screen will appear. From here you can go back to the main menu.

MULTIPLE TANKS

If you have undertaken a mission with more than one M1A2 under your command, you may jump to another tank whenever you like, even if the tank you are currently in is destroyed. Press the TAB key to bring up a list of tanks that are under your command, then use the ARROW keys and hit ENTER to automatically enter a different tank. Platoon leader's tanks are marked with a small arrow.

Chapter 3: Menus

The Main Menu allows you to explore the various aspects of Armored Fist 3. Type the underlined letter on your keyboard or click on the title with your mouse to select from the following options below:

Battles – Select "Battles" to jump into an individual mission. Whenever you complete a mission in a campaign, that mission is added to the Battle list so you will be able to select it for replay whenever you want. When you select Battles, you can scroll through all the available missions with the scroll bars to the left of the mission titles. Highlight a mission to get a description of the situation and goals. Press "User Mission" to load in a custom mission created by the Mission Editor. Accepting a mission will take you to the Mission Briefing Screen.

Campaigns – Choose "Campaigns" to start a new campaign game or continue a campaign in progress with an established commander. Once on the Campaign Screen, use the mouse to select the slot with the name of the commander who will be leading your campaign and press ENTER. If you wish to edit a commander's name, highlight it, then click on "Edit Name". To remove a commander from the list and free up a campaign slot, highlight your commander's name and then click on "Delete Player". This will permanently remove that commander's career from your system. The Commander's Stats is where you can view your overall performance ratings and score. Use the arrows to see information about the current campaign. When you accept a campaign, you will go directly to the Mission Briefing screen for the first mission in your campaign.

Play on NovaWorld – NovaWorld is your one-button access to multiplayer gaming. Simply click this option and you will be ready to join a multiplayer game on NovaWorld. You must be logged on to the internet to use this option.

NovaWorld Options – Play with up to 32 players on the Internet. See page 22 for more details on multiplayer options, including how to host your own games on NovaWorld.

Settings – Select "Settings" to customize the look, sound and feel of your game. See Game Settings on Page 18 for specific information

Tanker's Notebook – Click here to learn more about the features and tactics of the Abrams M1A2 Main Battle Tank.

Credits – Choose this to learn more about the team who brought you NovaLogic's Armored Fist 3.

Update Online – Select this to automatically update your Armored Fist 3 to the latest version of the game. You must be logged onto the Internet to use this option.

Quit – Choosing "Quit" will take you directly back to the Windows operating system desktop.

WARNING!
Unlatched hatch cover could swing and injure soldiers.

NOTE: Click "Accept" to move to the next menu, click "Back" to move back to the last menu without making any changes.

Chapter 4: Campaigns and Missions

CAMPAIGNS AND MISSIONS

Armored Fist 3 consists of four separate campaigns, each of which involves several missions related to a larger plot within a certain region of the world. How you command your tanks in one campaign mission may have long term effects throughout that campaign. In addition to the campaigns, you may also play individual missions in the Battles section. As you complete campaign missions, they will become available for replay in the Battles section.

TRAINING MISSIONS

To start you off, it is recommended that you get some training under your belt at Ft. Knox Army Base, Kentucky.

1. **Tank Driving:** You will learn to navigate from point A to point B.

2. **Weapons:** You will be taught to destroy specific targets from different stations in the tank.

3. **Coordination:** You will be taught basic formation control of platoon, and how to use the IVIS (Inter-Vehicular Information System).

4. **Allied Support:** You will be in a mission situation and be taught to call in artillery and air support.

5. **Field Test:** You will be free to experiment with the limits of the tank in a freeform mission.

SOLO DUTY

In Solo Duty missions, you control a single tank. This is ideal for the player who is not yet ready to juggle multiple units in battle.

HORN OF AFRICA - SOMALIA

Part 1 (missions 1-4): A well-connected and financed terrorist has decided to take advantage of the number of small skirmishes that have broken out in the Horn of Africa. He has set up a number of military training camps in southern Somalia near the Kenyan border. His forces are well equipped and well trained. The UN authorizes a pre-emptive strike.

Part 2 (missions 5-8): With the terrorist situation resolved, the UN has decided to solve another problem that has been festering for years in Somalia, namely the rampant anarchy. The Ethiopian-Eritrea conflict has spilled over into Somalia with each country financing and arming competing warlords within Somalia. The UN has authorized their forces to engage the warlords and crush their military ability. The UN Security Council has voted to place Somalia into a trusteeship governed by the Arab League.

MONSOON SEASON - THAILAND / MYANMAR

Pro-democratic forces supported by both Thailand and the US were on the brink of toppling the hard-line government of Myanmar when opposition forces regained the initiative. Pushed back to base camps along the Myanmar-Thailand-Laos border, the pro-democratic forces negotiated a settlement. Shortly after the cease-fire went into effect, Myanmar forces launched a surprise attack. Caught off guard, the pro-democratic forces abandoned their equipment and fled to Thailand. Myanmar forces pursued and engaged Thailand regulars. Myanmar has said that they will not withdraw from Thailand until Thailand settles the long-standing border conflict in Myanmar's favor. ASEAN and the UN have agreed to aid Thailand militarily to drive Myanmar forces out of Thailand.

DERVISH PASS - IRAN / AFGHANISTAN / PAKISTAN

Iranian and Afghani differences have escalated into open conflict. In an attempt to cut off Afghanistan from Pakistani support, Iranian forces have seized several cities just inside Pakistan and said that they will not withdraw until Pakistan ceases its support of Afghanistan. Pakistan has appealed to the US and China and both countries have agreed to send military forces.

OPERATION YETI - AZERBAIJAN / GEORGIA

Withdrawing from the CIS (Commonwealth of Independent States), both countries sought and received strengthened ties with the US, NATO, and Turkey. The US accepted Azerbaijan's offer and established a military base there. The UN supported Georgia's request to take over Russia's peacekeeping duties along Georgia's border with Abkhazia. Russia abstained on the UN Security Council vote to authorize UN peacekeeper intervention. The measure passed, and when UN peacekeepers arrived to take over, the Russian government demobilized their troops and abandoned them with their equipment. Faced with starvation, the abandoned troops signed on with the WPFFJ (Workers Party for Freedom and Justice) wishing to overthrow the current governments of both countries. At the same time, Russia began to supply weapons to the WPFFJ. The WPFFJ have now launched full-scale assaults against both legitimate governments and have initiated hostilities against the UN peacekeeping force. This is the closest to World War III that we have ever been.

CUSTOM MISSIONS

Armored Fist 3 includes the mission editor tool that you can use to create your own custom missions and share them with other Armored Fist 3 players. The program is called Af3med.exe. Open the Af3med.pdf for documentation for how to use the tool. You will first need to install the Adobe® Acrobat® Reader from the AF3 CD-ROM to read this file. To play a custom mission, make sure the mission file is located in your Armored Fist 3 game directory. While in the game, choose Play Battle and look for it in the User Missions section or select it in the multiplayer hosting options screen if it is a multiplayer mission.

WARNING!
NBC agents can kill
or injure you.

CHAPTER 5: Game Settings

GAME SETTINGS

Sim Mode — Select "Easy" to use the same controls to move the tank and fire regardless of which station you currently occupy. The "Advanced" setting gives you more specialized controls for each crew position. This manual will highlight controls that are specific to the Easy mode.

Auto Round Select — Turning this setting to "Enable" allows the Tank's Loader to automatically select the proper 120mm ammunition for the selected target. The current round must still be fired before the new round can be loaded. You can also override the Loader's decision by manually selecting the next ammunition type to be loaded.

Easy Target Lock — If you are playing in Advanced Sim Mode, selecting "Enable" will have the computer automatically evaluate and select the next available target the same way it does in Easy Sim Mode. If you select "Disable", you will have to acquire your own targets with the gunner or commander position.

Field Repair — With "Disable" selected, your tank will be more vulnerable to certain types of damage. In addition, this damage cannot be repaired during a mission. If you select "Enable", all the damage your tank receives will be repaired as you play.

Waypoint Tags — Select "Enable" if you would like to see a visual representation of each waypoint in the field. If you select "Disable", you will only be able to see waypoints on the map.

Tank Name Tags — By selecting "Enable", a name will appear above each of your tanks for ease in identifying them.

Target Box — Select "Enable" if you would like a red target box to appear over a targeted object.

Show Enemy Tags — The vehicle type and name of enemy tanks will appear over them if you select "Enable" for this setting.

Nearest Goal Marker — Turning this setting to "Enable" will cause a small "G" to appear on the screen that indicates the direction to your next goal. In capture the flag missions, the "G" shows you where the nearest flag is.
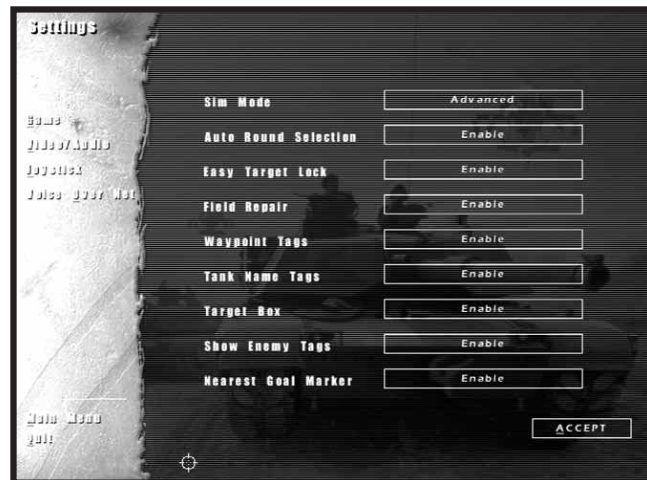
VIDEO/AUDIO SETTINGS

`Game` — Choose the screen resolution that is most suitable for your computer. The higher the resolution, the finer the graphical detail will be, at the risk of slower gameplay.

`Game Screen` — Selecting "Fullscreen" gives you a full-screen view of the game while playing. Select "Windowed" if you want to play Armored Fist 3 inside a Windows 95/98 window.

`Menus` — Selecting "Fullscreen" gives you a full-screen view of the menus. Select "Windowed" to display the pre-game menus inside a Windows 95/98 window. Depending on your system, you may need this option set to "Fullscreen" to connect to NovaWorld.

`Smoke` — Select "Enable" to see your defensive smoke. Turning this option to "Disable" may increase the speed at which the simulation runs. Although you won't be able to see it, the smoke will still hide your tank from enemy units.

`Tread Marks` — Vehicles will leave a visible trail behind them as they move if you have this setting enabled. If your computer is running slow, you may want to switch it to "Your Tank Only" or "Disable".

`Sound Volume` — Use the mouse to slide the bar to an appropriate volume level for game sounds.

`Menu Music` — This bar is used to set the volume level of the music played in the menu.
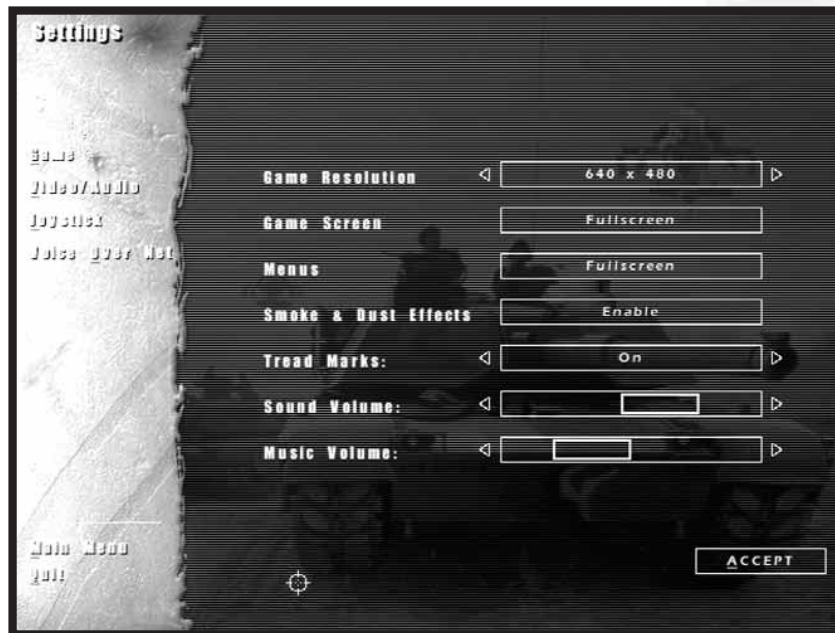
VOICE-OVER-NET SETTINGS
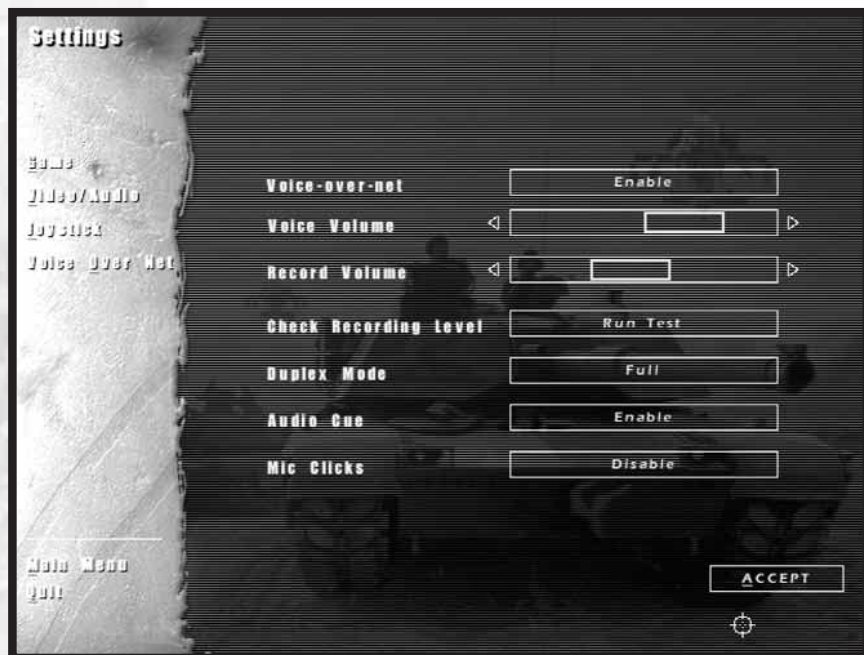
Voice-Over-Net – Set to "Enable" if you want to use the Voice-Over-Net feature. Disabling will not allow you to transmit or receive voice messages or access the Voice-Over-Net interface.

Record Volume – This slider bar is used to set the sensitivity level of your microphone. If people are having a hard time hearing you, try increasing this level. If you are frequently "peaking"(reaching a maximum volume level), in the red, you may want to adjust this bar down.

Run Test – When you press "Check Recording Level" begin talking normally for five seconds. The computer will automatically playback the audio you just recorded. If you are not satisfied with the levels (see VU meter on page 26), adjust the Record Volume option.

Duplex Mode – In "Full" mode, you will be able to transmit and receive voice messages (if you have a Full-Duplex soundcard). If you do not have a Full-Duplex soundcard or if you do not wish to send voice messages but you would still like to receive them, select "Half".

Audio Cues – Many Voice-Over-Net system text messages are accompanied by an audio cue to draw your attention to them. Disable this option if you do not wish to hear those alert tones.

Mic Clicks – Similar to that of a walkie-talkie, an audible click will play before and after all incoming messages if you enable this option. Disable this option if you do not wish to hear these clicks.

Voice-Over-Net Volume – This slider bar allows you to set the speaker volume for incoming voice messages. This does not have any effect on your microphone recording levels.

JOYSTICK SETTINGS

`Joystick` — If you wish to use a joystick to control your tank, select "Windows Joystick". If you select "None", the keyboard's ARROW keys are the only way to control the tank.

`Twisting Stick or Pedals` — Enable this option if you wish to use Rudder Pedals or a joystick with a twisting axis in Armored Fist 3.

`Reverse Twisting Stick or Pedals` — If you are using a twisting stick or pedals, you may reverse the direction it normally turns with this setting.

`Pedals Control` — Select what function of the tank you would like your twisting stick or pedals to control. You can chose between "Tank Steering", "Turret", "CITV" and "Cupola".

`Force Feedback` — Armored Fist 3 supports the use of force feedback joysticks. Select "Enable" if you have one and would like to utilize the force feedback aspect of it.

Armored Fist 3 supports Force Feedback joysticks. To reconfigure a specific joystick, please read the instructions that came with your joystick.

WARNING!
Vehicle movement can throw you from your seat and injure you. Use of seatbelts is mandatory.

Chapter 6: NovaWorld

NOVAWORLD

NovaWorld allows you to easily get into a multiplayer game, where up to 32 players can compete. You can join a multiplayer game at any time, and leave whenever you wish. That means unless you are the Host, you do not have to be present at the initiation of an ARMORED FIST 3 game to join in, and if you leave in the middle of a mission, the other players can continue to play without you. To begin a multiplayer game session, first select "Play On NovaWorld" from the Main Menu. Click on the name box to type in your name and press ENTER. If the game requires a password, type it in the appropriate box. In the upper right-hand corner, you can choose from a variety of emblems to display on your tank. Select "Join" to enter NovaWorld or "Host" to form your own game.

MULTIPLAYER GAME TYPES

There are 5 different types of multiplayer games that you can play on NovaWorld.

COOPERATIVE

Up to 6 players can work together to take on any mission from the list. These missions are exactly like the single player campaign missions, except that their difficulty level increases based on the number of players specified when the game is hosted. Each player will have a platoon of four tanks to control. When the player's last tank is destroyed, he goes into the "Inhabit-Cam", where he can watch from the position of any remaining live players until the game is over.

DEATHMATCH

In Deathmatch missions up to 32 players compete against each other. Each player will command one tank. When a player's tank is destroyed, it will restart at the spawning point farthest from another live player location. Points are earned every time you destroy another player's tank and are removed every time you die. At the end of the time limit, the player with the most points wins.

TEAM DEATHMATCH

Like in Deathmatch, up to 32 players control one tank each in an all out battle. In Team Deathmatch, players are divided into two teams (Team Red and Team Blue). Points are awarded and lost on a team basis using the same rules as in Deathmatch except that, unless disabled by the game host, friendly-fire kills subtract two points each. Missions are timed and the team with the most points at the end is the winner.

RED ON BLUE

In Red on Blue, up to 8 players may play at a time. The players are divided into two teams (Team Red and Team Blue) and each player controls a platoon of 4 tanks. Unlike Team Deathmatch, the mission objectives are set for each team similar to cooperative missions. Rather than just destroying each other's tanks, the real goal of this game is to complete your mission objectives before the enemy can complete theirs. When a player's platoon is completely destroyed, he/she goes to the "Inhabit-Cam",where he can watch from the position of any remaining live players until the game is over. It is possible for time to expire with no winner.

CAPTURE THE FLAG

In Capture the Flag up to 32 players will be divided into 2 teams (Team Red and Team Blue) with each player controlling one tank. The object is to collect all of the opposing team's flags (between 1 and 5 depending on mission) and return to base with them. When a tank picks up a flag, it will be attached to the back of the tank's hull for all to see. If a tank is destroyed while carrying a flag, the flag is dropped at that location. A dropped flag may be picked up by another tank on the same team and carried again. If a tank from the team that owns it touches a dropped flag, the flag will reappear back to its initial location. It is possible for time to expire with no winner.

WARNING!
Heater and engine exhaust fumes contain deadly poisonous gases. Severe exposure could cause brain damage.

HOSTING OPTIONS

NovaWorld
Host Options

Game Name:	
Game Password:	
Red Team Password	
Blue Team Password	
Server Type:	Serve and Play
Map selected:	CO-OP 1
Game Type:	◁ Co-operative ▷
Max Player:	◁ 8 ▷
Game Time Limit:	◁ 10 ▷
Game Kill Limit:	◁ 20 ▷

Country		Targeting Lock:	On
Sim Mode:	Easy	Tread Marks:	On
Friendly Fire:	Disable	Tank Views Only:	On
Field Repair:	Enable	Enemy Tags:	On

Reset

Main Menu
Quit

BACK   Start Hosting

`Game Name` – Type the name you want your game to appear as to other players.

`Game Password` – If you want to limit who can play in your game, type the password they must know to join your game.

`Red/Blue Team Password` – You may put a password on a team to limit who may join which side. Make sure that you give the password to the appropriate people before the game starts.

`Server Type` – If you will be playing in the game you host on your computer, choose "Serve and Play". The host should always be the person with the fastest computer setup. If you will have a dedicated server for hosting the game, choose "Serve Only". The game will play faster with a separate unused computer acting as the host. Once you hit "Accept", you will see a host screen with various relevant game information.

`Map Selected` – The game will be played in the map you select from this list.

`Game Type` – Select the type of game you would like to host. See Page 22 for a description of the different game types.

`Maximum Players` – Select the maximum amount of players that you will let join this game. Co-operative games can have up to 6 players. With Team Death Match and Red on Blue games, you are limited to a maximum of 8 players. You may include up to 32 players in a Death Match and Capture the Flag Game.

`Game Time Limit` – The game automatically ends after this number of minutes has passed.

`Game Kill Limit` – The game will end automatically after a single player or team scores this number of kills.

`Country` – Type the three letter abbreviation of your country here if you want other players to know where the game is being hosted from.

Sim Mode – Select "Easy" to use the same controls to move the tank and fire regardless of which station you currently occupy. The "Advanced" setting gives you more specialized controls for each crew position. This option overrides the individual player's setting for Sim Mode.

Friendly Fire – Select "Enabled" if you want tanks to be susceptible to all attacks, whether from enemy or ally. By selecting "Disabled", tanks will be invulnerable to friendly fire.

Field Repair – With "Disabled" selected, your tank will be more vulnerable to sustain certain types of damage. In addition, this damage cannot be repaired during a mission. If you select "Enabled", all the damage your tank takes will be fixed as you play. This option overrides the individual player's setting for Damage.

Targeting Lock – If you are playing in Advanced Sim Mode, selecting "Enable" will have the computer automatically evaluate and select the next available target the same way it does in Easy Sim Mode. If you select "Disable", you will have to acquire your own targets with the gunner or commander position. This option overrides the individual player's setting for Easy Targeting Lock.

Tread Marks – Selecting "Disable" will turn of the Tread Marks setting for all players regardless of their local settings. If you select "Enable", users will see or not see tread marks based on their personal settings.

Tank Views Only – By selecting "Enabled", players will not be able to use their chase views. This allows for a more realistic 1st person feel. "Disabled" allows players to access the chase camera views.

Enemy Tags – The vehicle type and name of enemy tanks will appear over them if you select "On" for this setting. This option overrides the individual player's setting for Show Enemy Tags.

Mission – Select the mission, which you would like to play the game in. This list changes for each game type.

WARNING!
Soldiers near moving turret or guns could be killed or injured. Equipment could be damaged.

Chapter 7: Voice-Over-Net™

VOICE-OVER-NET

Voice-Over-Net is a built in voice communication system for use on NovaWorld. The set up is simple and can be done entirely while in Armored Fist 3. All you will need is a Full-Duplex sound card and a microphone plugged into the Mic In (not Line In) jack of your sound card. Note that a Half-Duplex sound card will allow you to hear other players, but not to talk.

After plugging in your Microphone (make sure it is in the Mic In and not the Line In input), start Armored Fist 3 and click on Options. Upon starting or joining a game, all players will be defaulted to "muted" to eliminate unwanted conversation. Unmute those players that you want to talk to.

1. SELECTED PLAYER — This shows who you are currently set to talk to and their player number (as seen on the player list with the "L" key). Use the Insert and PAGE UP keys to cycle back and forth through the list of players. The "muted" icon will appear after the player's name if you have muted them. Use the DELETE key to unmute a player or the CONTROL DELETE key combination to mute the currently selected player. If their name appears in red that means that they have muted you. In team games, you can only select players on your own side to talk with.

2. RECORDING LEVEL — This bar indicates your current recording volume exactly as it was set in the Settings Menu. Use the CONTROL PAGE UP and CONTROL INSERT keys to adjust this level up and down respectively.

3. VOLUME UNIT (VU) METER — When you speak, this bar will display your current voice levels. Your optimum range should be in the yellow area. Going in to the red indicates that you are in danger of having your speech clipped (cut off). If all three red boxes are lit, then you are speaking too loudly and your message won't transmit. Be careful to judge your vocal range so that normal talking and excited yeling fit within the yellow area. The bar will also indicate your peak level (maximum volume level reached). After you speak, the top bar you have reached will remain lit for a moment to show you where you are peaking.

4. INCOMING MESSAGE — This line appears when someone is talking to you. The "Recv" light blinks when audio packets are being received (i.e. someone is talking to you). A few seconds after the message ends, this part of the window will automatically close. You can reopen it to display the last person to contact you with the PAGE DOWN key.

WARNING!
Discharging gas can freeze your skin. Keep away from discharging gas.

VOICE-OVER-NET KEYBOARD COMMANDS

PAGE UP- Next Player - This key will select the next commander on the player list to receive your outgoing voice messages. Press the L key to see the complete list of players in the game and their unique player numbers.

INSERT- Previous Player - Pressing this key will cycle the player list in reverse for your outgoing voice message.

DELETE - Unmute Selected Player - Press this key to be able to listen to a player who was previously muted. Note that all players begin the game muted.

CONTROL DELETE- Mute Current Talker - When you no longer want to hear voice messages from a certain player, you can press these keys to break communication and put them on mute mode. The word "muted" appears next to their name in the Selected Player line.

CONTROL HOME- Status Display On/Off - The Voice-Over-Net status display will appear in the upper left corner when you press this key combination. Pressing it again will make the display disappear.

HOME- Extended Display On/Off - This key switches the Voice-Over-Net extended display on and off.

END- Break Talker - To break communication with a player who is talking to you in order to free up your line for another talker, press this key. Unlike Mute, the player can try to contact you again by pressing the Push to Talk button on their end.

KEYPAD 0- Push to Talk - Hold this button down to transmit a voice message to the currently selected player.

CONTROL PAGE UP - Adjust Record Volume Up - If people are having a hard time hearing you, try adjusting your Microphone's record level up with this key combination.

CONTROL INSERT - Adjust Record Volume Down - If your outgoing messages are peaking in the red on the VU level meter, you may wish to decrease the mic's sensitivity by using these keys.

PAGE DOWN- Display Last Talker - By pressing this key, the name of the last person to send you a voice message will appear grayed out on the incoming message line.

COTROL PAGE DOWN- Select Last Talker - By pressing this key combination, the last player to send you a message will be selected to receive your outgoing voice messages.

INTERNET ETIQUETTE

NovaLogic does not monitor Voice-Over-Net communication. If you are having a problem with any other player, we strongly suggest that you mute them. When using any form of communication, please be considerate to other people. Using hateful, discriminatory or obscene language will probably get you muted. You can try using text chat (the T key) to ask them politely to unmute you. If they choose to keep you muted, it probably wouldn't have been an interesting conversation anyway.

TROUBLESHOOTING

I CAN'T TALK WITH EVERY PLAYER   You are limited to talking to one player at a time. In team games, you are only allowed to talk with players on your side. Also some players may have Voice-Over-Net disabled in their Settings menu.

I CAN'T TALK WITH ANY PLAYERS   All games start out with everyone muted. Use the Text Chat (T key) to ask a player to unmute you. Make sure you have a Full-Duplex sound card. Check to see that it is set to Full-Duplex in the Settings Menu. Check the microphone connection to your sound card to make certain it is going into the Mic In jack and not the line in.

I CANNOT HEAR OTHER PLAYERS, BUT I HEAR OTHER GAME SOUNDS   Check to see that you have unmuted the player. Check the Voice-Over-Net Volume in the Audio Settings Menu. Check to make sure you have Voice-Over-Net enabled in the Voice-Over-Net Settings Menu.

I GET A TONE WHEN I TRY TO TALK SOMETIMES   If the person that you are trying to talk to is already engaged in a conversation, you will get a busy signal. Simply wait until they are done speaking or ask them in Text Chat (T key) to break contact with the other person.

I CAN HEAR MY OWN VOICE ECHO BACK TO ME   This usually occurs when the player you are talking to has his microphone too close to his speaker. You are hearing your voice go through his speakers and then back to you through his microphone.

OTHER NOISE IS BLEEDING IN FROM MY CD PLAYER/STEREO   You may need to go into your Windows Volume Control to change the settings on any device you have going through the Line In jack on your sound card. Right click on the speaker symbol on your Windows 95/98 Task Bar. This will bring up the VOLUME CONTROL window. Select PROPERTIES under OPTIONS and click on RECORDING. Hit OKAY to close this window and uncheck all selected boxes except for your microphone.

I STILL HAVE PROBLEMS   If you are still having problems, you should make sure you have the most recent sound drivers for your sound card. These can be found on the web site of the manufacturer of your sound card. If this does not solve your problems, please contact NovaLogic Technical Support.

WARNING!
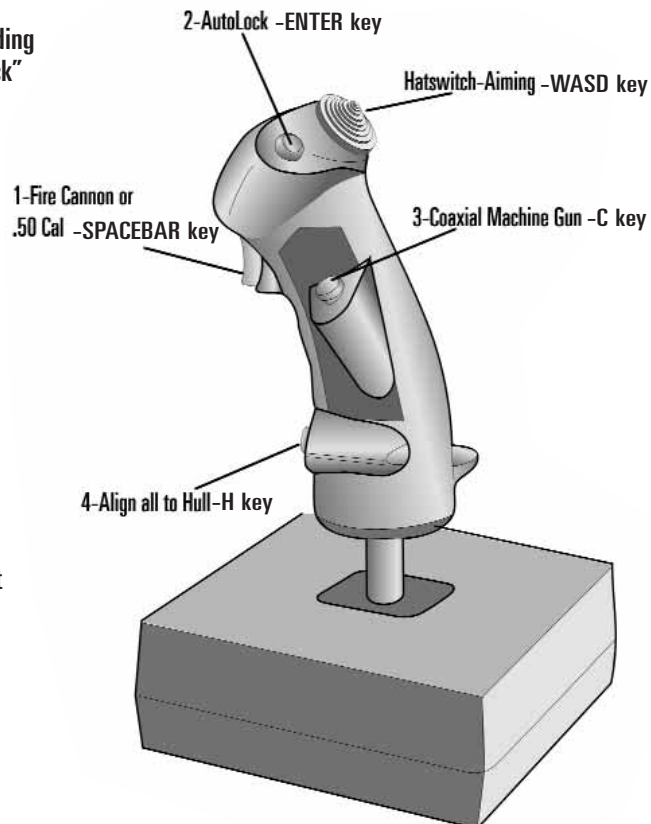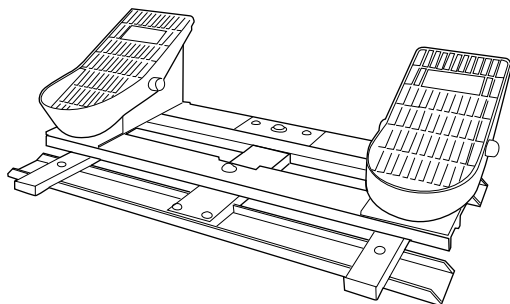Sparks from static electricity could cause a fire or explosion.

Chapter 8: General Controls

THE JOYSTICK

Armored Fist 3 can be played with either your keyboard or a joystick controller, depending on your personal preference. To use a joystick, you must first select "Windows Joystick" in the joystick settings. The joystick commands represent the most fundamental difference between Easy and Advanced Sim Mode. When using the joystick to drive, the more you press the joystick forward, the faster your tank will go in that direction. Turning the joystick left or right will pivot your tank accordingly. Pulling back on the stick will put your vehicle in reverse. When aiming, pushing forward and back on the joystick will direct the barrel down and up respectively within the natural angle boundaries of the turret or machine gun. You may have to move the tank to allow for a particularly high or low angle shot. The chart to the right outlines what each button on the joystick does in the various stations on the M1A2 Abrams.

RUDDER PEDALS AND TWISTING JOYSTICKS

In the Settings menu, you can assign specific control for external rudder pedals or a twisting joystick if you have them. Your options are to have them control the left/right axis of any of the following controls: Tank Steering, Turret, CITV or Cupola.

2-AutoLock –ENTER key

Hatswitch-Aiming –WASD key

1–Fire Cannon or
.50 Cal –SPACEBAR key

3-Coaxial Machine Gun –C key

4-Align all to Hull–H key

Default command and respective keyboard key

JOYSTICK CONTROLS

Easy Mode					
	Chase Views	TC Buttoned View	TC Unbuttoned View	Gunner's View	Driver's View
Joystick	←——————————————————————— Drive Tank —————————————————————→				
Ctl-Joystick	Control Cannon	Control CITV	Control .50 Cal	Control Cannon	Control Cannon
Hatswitch	Control Cannon	Control CITV	Control .50 Cal	Control Cannon	Control Cannon
Ctl-Hatswitch	Control .50 Cal	Control Cannon	Control Cannon	NA	NA
Button 1	Fire Cannon	Hand off target to Gunner	Fire the .50 Cal	Fire Cannon	Fire Cannon
Ctl-Button 1	Fire the .50 Cal	Fire Cannon	Fire Cannon	Fire Cannon	NA
Button 2	AutoLock Cannon	AutoLock CITV	AutoLock .50 Cal	AutoLock Cannon	AutoLock Cannon
Ctl-Button 2	AutoLock .50 Cal	AutoLock Cannon	AutoLock Cannon	NA	NA

Advanced Mode					
	Chase Views	TC Buttoned View	TC Unbuttoned View	Gunner's View	Driver's View
Joystick	Drive Tank	Control CITV	Control .50 Cal	Control Cannon	Drive Tank
Ctl-Joystick	Control Cannon	NA	Control Cannon	NA	NA
Hatswitch	Control Cannon	NA	Control Cannon	NA	NA
Ctl-Hatswitch	Control .50 Cal	NA	NA	NA	NA
Button 1	Fire Cannon	Hand off target to Gunner	Fire the .50 Cal	Fire Cannon	Fire Cannon
Ctl-Button 1	Fire the .50 Cal	NA	Fire Cannon	Fire Coax.	Fire the .50 Cal
Button 2	AutoLock Cannon*	Designate Target	AutoLock .50 Cal*	Lase/AutoLock Cannon*	AutoLock Cannon*
Ctl-Button 2	AutoLock .50 Cal*	AutoLock CITV*	AutoLock Cannon*	NA	AutoLock .50 Cal*

* When AutoLocking is selected in the Sim Mode Menu.

Keyboard Controls

GENERAL CONTROLS

Esc	Exit – Use this key to exit the game.
Pause	Pause – This key pauses the simulation. Pressing it again will resume play.
I	ID Tags –This will toggle ID tags on and off for various objects if enabled in the Settings Menu.
K	Stats – This key will display the current game statistics, including the mission goals and number of your tanks remaining.
?	Help – This key will bring up a list of the keyboard commands for Armored Fist 3.
R	Recent Messages Display – A list of the most recent dialog text messages from the computer and other players.
Control V	Toggle Screen- Pressing these keys will toggle between fullscreen and windowed mode.

MOVEMENT CONTROLS

Arrows	Primary tank control – as per joystick direction controls on page 29.
W, A, S, D	Secondary Controls – as per hatswitch controls on page 29.
F	Fine Control – Pressing "F" toggles fine control on and off.
G	All to Cannon – This key will automatically bring the tank's hull into line with the cannon.
H	All to Hull – Use this key to quickly bring the cannon to bear on an opponent directly in front of you.
~	Auto-Stabilization On/Off – Turning the auto-stabilizer on, keeps the cannon and CITV pointed at the current heading and elevation of turret and cannon regardless of movement. Press again to turn this feature off.
1	Driver Stop – In Advanced Sim Mode, this key will bring the tank to a complete stop regardless of which station you are in when you press it.
2	Driver 1/4 speed – In Advanced Sim Mode, this key instructs the driver to bring the tank to quarter speed.
3	Driver 1/2 speed – In Advanced Sim Mode, this key sets the tank's speed to one half of its potential on the current terrain.
4	Driver Full Speed – In Advanced Sim Mode, press this key to accelerate to and maintain top speed regardless of which station you inhabit.

Keys 1-4 do not function in Easy Sim Mode.

WEAPON CONTROLS

5	Load SABOT – This key selects a SABOT round as the next to be loaded into the cannon after the current round is discharged.
6	Load HEAT/MPAT – Depending on the mission loadout, this key will select either a HEAT or MPAT round.
7	Load STAFF – By pressing this key, the loader will prepare a STAFF round to be the next round of ammunition placed in the cannon.
8	Call Air Support – In some missions, you will be able to request air support in the form of either A-10 "Warthog" aircraft or Apache helicopters to come to your aid. The aircraft will patrol around your unit, searching for enemy targets. Acquired enemies will be immediately downloaded to your IVIS.
9	Call Artillery Support – In some missions, pressing this key will call in heavy artillery fire upon your selected target. Once requested, an artillery strike cannot be recalled.
0	Smoke Grenade – To help mask your tank from the enemy, press this key to fire a salvo of smoke grenades.
Backspace	Cycle Weapon – Cycle through your 120mm ammunition types with this key.
Spacebar	Fire/Hand-off – Depending on what station you are at this will either fire the main weapon or hand-off a target to the gunner.
C	Fire Coax MG – Press this key to fire a burst from your coaxial machine gun. It will aim the same direction as the cannon.
' (Apostrophe)	Cycle Auto Target – Cycles between 3 priorities:

- Auto-targeting Priority: Hot Threats

- Auto-targeting Priority: All

- Auto-targeting Priority: Last Attacker

Enter	Lock/LASE – Press this key to establish a target lock.

PLAYER VIEWS

F1   Chase Views Cycle — Press this key to cycle through the external tank chase views. This option may be disabled in some multiplayer games for a greater sense of realism.

F2   Gunner's Station — This will put you in the Gunner's position on the M1A2 Abrams.

F3   GPS — This is a close up view of the Gunner's Primary Sight, used for aiming and firing the 120mm cannon.

F4   GAS — The Gunner's Auxiliary Sight displays a view directly along the barrel of the cannon for precise aiming.

F5   Tank Commander Buttoned View — This key will put you directly in the Tank Commander's position within the tank.

F6   CITV — The Commander's Independent Thermal Viewer is used for viewing and acquiring targets.

F7   IVIS — The Inter-Vehicular Information System gives the commander important details on the mission, enemy forces and terrain.

F8   Tank Commander Unbuttoned View — Pressing this key will put you in the commander's pop-up position looking outside of the tank. This gives you the best natural view of the surroundings as well as control of the .50 caliber machine gun.

F9   Driver's Position View — Use this key to jump into the Driver's position.

F10   Tactical Map — This key brings up the full screen overhead map.

F11   Map/GPS Overlay On/Off — Use this key to bring up a map overlays to quickly get your bearings. This overlay does not appear in every screen.

F12   Map/GPS Toggle — This switches the Map/GPS overlay between displaying a small map or the GPS (Gunner's Primary Sight) view. The GPS view can help with aiming the gun when playing in external views.

\-   Zoom out on map — Press this key to see a larger area displayed on the map screen.

\+   Zoom in on map —Press this key to zoom into a more detailed area of the map.

Keypad 8   Camera Up - While in the chase view, use this key to pan the external camera up the tank.

Keypad 4   Camera Left - Hold down this key to move the camera view to the left.

Keypad 2   Camera Down - Use this key to pan the camera view down.

Keypad 6   Camera Right - Hold down this key to move the camera view to the right.

Keypad -   Zoom out on map — Press this key to see a larger area displayed on the map screen.

Keypad +   Zoom in on map —Press this key to zoom into a more detailed area of the map.

34

OTHER TANK COMMANDS

TAB	Jump to Other Tank - This key will bring up a menu displaying the list of tanks that you can control. Select the one you wish to directly control here to instantly jump to it.
O	Platoon Orders - Press this to bring up the Platoon Orders menu, allowing you to send orders to your units when you control multiple tanks.
P	Polarity — This key will reverse polarity of thermal imaging in the CITV, GPS and Driver's view making heat sources appear as dark objects. Press again to return to normal polarity where hot objects appear lighter on the screen than cold objects.
;	Thermal Imaging — This key will toggle your GPS and Driver's view screen between visual and thermal imaging mode.
[	GPS magnification 3x — This key will select 3x magnification for the GPS and CITV.
]	GPS magnification 10x — Press this key to change the GPS or CITV to a closer 10x magnified view.
E	Engine smoke on/off — This key will toggle the engine smoke on and off.
Y	Next Waypoint — This key cycles through your waypoints.

FORMATION QUICK CONTROLS

V	Wedge - This key will put your current platoon into a Wedge formation.
B	Line — Select this key to place your platoon in a Line formation.
N	Column — To quickly order your platoon into a Column formation, press this key.
M	Diamond — This key will place your platoon in a Diamond formation.
<	Refuse Left — Set the formation to Refuse Left by pressing this key.
>	Refuse Right — Set the formation to Refuse Right by pressing this key.

MULTIPLAYER CONTROLS

L	Player List - This key will list all of the players in the current game.
T	Text Chat - By pressing this key, you can send text messages to all players in the game.
Control T	Team Chat - To send text messages to only members of your team, press Control with the T key.

COMMAND CODES

By using the T key to bring up a text message box, you can type in certain commands.

"wp tags"	Type this commands to toggle Waypoint tags on/off.
"enemy tags"	Use this command to toggle Enemy tags on/off. Enemy tags will only be visible when the ID tags are turned on (I key).
"marker"	Toggle nearest goal/flag marker on/off with this text command.
"targetbox"	Type this command to toggle target box on/off.

EXIT
Esc

GUNNER

| CHASE VIEWS CYCLE F1 | GUNNER STATION F2 | GUNNER GPS F3 | GUNNER GAS F4 |

TANK COMMANDER

| TC STATION F5 | TC CITV F6 | TC IVIS F7 | TC UNBUTTON F8 |

DRIVER

| DRIVER STATION F9 | TACTICAL MAP F10 | MAP/GPS OVERLAY ON/OFF F11 | MAP/GPS TOGGLE F12 |

| Print Scrn | Scroll Lock | PAUSE Pause |

Command Codes
By using the T key to bring up a text message box, you can type in certain commands.

"wp tags"
"enemy tags"
"marker"
"targetbox"

ADVANCED DRIVER

WEAPON CONTROLS

| AUTO STAB. ` | STOP 1 | 1/4 SPEED 2 | 1/2 SPEED 3 | FULL SPEED 4 | SABOT 5 | HEAT/ MPAT 6 | STAFF 7 | CALL AIR SUPPORT 8 | CALL ARTILLERY SUPPORT 9 | SMOKE GRENADE 0 | MAP ZOOM OUT — | MAP ZOOM IN + | \ | CYCLE WEAPON ← |

VOICE-OVER-NET CONTROLS

| PREV. PLAYER *RECORD VOLUME DOWN* Insert | EXTENDED ON/OFF *DISPLAY ON/OFF* Home | NEXT PLAYER *RECORD VOLUME UP* Page Up |

| Num Lock | / | * | TAC MAP ZOOM OUT — |

SECONDARY CONTROLS

| JUMP TO OTHER TANK Tab | Q | DOWN ↑ W | ENGINE SMOKE E | RECENT MSGS R | TALK TEAM T | NEXT WAYPOINT Y | U | ID TAGS I | PLATOON ORDERS O | POLARITY P | GPS MAG 3X [| GPS MAG 10X] |

| UNMUTE SELECTED PLAYER *MUTE CURRENT TALKER* Delete | BREAK CURRENT TALKER End | DISPLAY LAST TALKER *SELECT LAST TALKER* Page Down |

| 7 | CAMERA UP 8 | 9 | TAC MAP ZOOM IN + |

| Caps Lock | LEFT ← A | UP ↓ S | RIGHT → D | FINE CONTROL F | ALL TO CANNON G | ALL TO HULL H | J | GAME STATS K | PLAYER LIST L | THERMAL IMAGING SYSTEM ; | CYCLE AUTO-TARGET , | LOCK/LASE Enter |

| CAMERA LEFT 4 | 5 | CAMERA RIGHT 6 | + |

PRIMARY TANK CONTROLS

QUICK FORMATION

| Shift | Z | X | FIRE COAX. C | WEDGE *TOGGLE SCRN* V | LINE B | COLUMN N | DIAMOND M | REFUSE LEFT < | REFUSE RIGHT > | HELP ? | Shift |

| DOWN ↑ |

| 1 | CAMERA DOWN 2 | 3 |

| *Modified Control* Ctrl | Alt | Space FIRE/HAND-OFF | Alt | *Modified Control* Ctrl |

| LEFT ← | UP ↓ | RIGHT → |

| PUSH TO TALK 0 | Del | Enter |

36

37

Chapter 9: Playing Armored Fist 3

Armored Fist 3 offers a variety of techniques for locating and destroying enemy targets. It has all the latest computerized targeting systems, and features a variety of weapons and ammunition types; each designed to engage specific types of targets. Armored Fist 3 also provides access to firepower from external sources, in the form of Air and Artillery support, and features a detailed Damage model.

CREW POSITIONS

Armored Fist 3 allows you to take the place of most of the crew members aboard the M1A2. You can occupy two different positions as a Tank Commander, or you can take the place of a tank's Gunner or Driver. You will not be able to act as the Loader, but you will be able to hear that crew member at work. Each member of the crew has a set of specialized functions to perform and controls to operate. These are detailed in chapters 10-14.

You can also view the tank from a Chase View outside of the tank. Every mission starts in this view. Chase Views provide a great deal of information about the tank's current situation, and have a monitor showing either a Gunner's Primary Sight (GPS) or a tactical map. Armored Fist 3 automatically brings up the GPS whenever you have a target locked into the gunnery system, and shows the map if you do not. You may also turn this monitor off with the F11 key.

LOCATING THE ENEMY

The first step in destroying an enemy force is finding it, and the M1A2 tank and its associated digital systems give you exceptional tools with which to do so. The most important target location system in your tank, however, is the crew. As has been the case for more than 80 years, the best target location device in any tank is the human eye.

The effectiveness of visual target location depends on where the observer is in the tank. A commander in the Unbuttoned position, for example, has a much better view of the battlefield than someone buried in the turret watching screens. Your best chance of spotting an enemy is to get your head outside and look. You can do this by selecting the Tank Commander's Unbuttoned view with the "F8" key.

Because of standard camouflage techniques and the ranges at which modern tank combat can take place, your first visual clue that an enemy force is in the neighborhood will probably be motion. Keep your eyes on the horizon and on the terrain around your tank to spot the small movements that can give away the location of an enemy. The Information Bar at the bottom of all screens displays relevant tank and mission information. Refer to Page 8 for more details on the Information Bar.

Headquarters constantly feeds combat information from many sources into the tank's Inter-Vehicular Information System (IVIS). The IVIS can give advance warning of the presence of an enemy, but only if another friendly unit has spotted the enemy force. When your tank has located an enemy it will appear on the IVIS screen and tactical maps.

The Commander's Independent Thermal Viewer (CITV) is also a good target location device. It offers a magnified view of the situation around the tank, either 3x or 10x. This feature can be helpful, especially when trying to identify a target at long range. The CITV operates in a thermal mode, allowing you to pick out an enemy vehicle by its heat signature, which is useful in low-visibility conditions. A tank commander can also use the CITV to locate an enemy, then pass it to the Gunner to target and engage.

LOCKING ON A TARGET

Once you have spotted an enemy, you will need to lock the M1A2's weapons systems onto that target. The Gunner can enter an enemy into the targeting system or the Tank Commander can hand off a target in the CITV to the Gunner. Before the gunnery system can get an accurate shot at a target the Gunner must first use the targeting laser system to determine the target's exact range. The tank's target computer then calculates the proper bearing and elevation for the cannon and brings the tube to bear. The Gunner can then fire, with an excellent chance of a first-round kill.

Press the ENTER key sends a laser beam from the Gunner's Primary Sight (GPS). The range to whatever is in the GPS reticle is then passed to the targeting computer. Note that the laser will bounce off anything in its path. You can determine the range to a tree just as easily as to a T-80 Main Battle Tank.

> In Easy Sim Mode, locking the cannon onto a target is done by simply pressing Button 2 on the joystick or the ENTER key. This will cycle through all appropriate targets. A red box around an object indicates a target lock.

TARGET LOCK PROBLEMS

There may be times when you have an enemy clearly in sight, but pressing ENTER fails to lock that target into your system. This is probably because, though you can see the enemy, the Gunner's Primary Sight (GPS) cannot since it is somewhat lower on the turret than the tank commander's head in the unbuttoned position. This is even more likely if you are running the simulation from a Chase view. You will have to maneuver to bring the enemy object into the gunsight.

Obstructions, even temporary ones, can also interfere with your ability to lock onto a target. It may, for example, be quite difficult to acquire or maintain a target lock on a vehicle that is moving in and out of cover, or in situations where other vehicles come between you and the object you want to target. Engine smoke or smoke grenades, including your own, can also break a target lock or prevent you from getting one in the first place. Your crew will give you an intercom message if the target becomes obscured.

There are also situations where the gunsight proclaims a target lock, but you cannot fire at the target. In this circumstance you will see the word "Fault" in red, or a small red "F" (depending on where you are in the simulation), and your Gunner will tell you that he cannot bring the tube to bear on the target. "Fault" refers to a Barrel Fault. The barrel of the cannon is unable to bear on the target, even though the gunsight can see it, this is generally because the vertical angle to the target is higher or lower than the cannon can reach. Again, you may have to maneuver to bring the target into the kill envelope. Note that if conditions are right, a STAFF round may be able to get you a kill even if the tube cannot bear directly on the target.

MAINTAINING TARGET LOCK

The M1A2's cannon can be automatically stabilized in both the horizontal and vertical planes, so it shoots accurately while the tank is moving, even at high speeds. The default mode for your tank is with Autostabilization not engaged. Press the ~ (tilde) key to toggle Autostabilization on and off. You can tell that the stabilizer is engaged because the target view in the Gunner's Primary Sight remains stable while your tank is moving. The turret rotates and the cannon elevates automatically to keep the target in the gunsight.

In Easy mode, the cannon is automatically stabilized whenever you have a target locked.

From the Gunner's Position you have access to specialized tools that give you greater control over the exact point at which your cannon will fire. The M1A2's targeting system normally will lay the cannon very accurately, but against dug-in or partially obscured targets it may be necessary to take fine control of the process yourself in order to ensure a hit.

TARGETING MODES

There are three different targeting modes. Use the ' (Apostrophe) key on the keyboard to cycle through the selections and find the one that is best for your combat situation.

Hot Threat Targeting Mode- (The default targeting mode) The crew evaluates all potential targets and engages the one that is believed to be the most dangerous. Pressing Button 2 or ENTER repeatedly will cycle you through progressively less threatening targets. If you do not agree with the selected target you can continue to press the button to cycle through available targets.

All Targets Mode- In this mode the crew will target all objects, including friendlies. When you press Button 2 or ENTER you cycle through all friendly, enemy, and neutral objects. In all targeting mode when cycling through a target set the crew will target first those objects closest to where the cannon is pointing. If you want to target a specific set of objects quickly, turn the turret to face their direction before beginning the targeting process.

Target Last Attacker Mode- The crew will engage the last enemy that attacked your tank. When you press Button 2 or ENTER the crew will automatically lock on to that enemy. If the last enemy that attacked the tank is dead or no longer visible the tank will choose targets the same way it would in the Hot Threat Targeting mode.

LOADING THE CANNON

You can select the ammunition for the 120mm cannon from a Chase View or from the Tank Commander's Unbuttoned position by using the BACKSPACE key to cycle through the ammunition types. In the Gunner's location, you have a set of buttons to make this choice, and there are keyboard shortcuts as well (5-SABOT 6-HEAT/MPAT 7-STAFF)

When a tank crew in combat loads a round into the cannon, the only way they remove that round is by firing it. During battle removing an unfired round from the breech is considered too dangerous and too time-consuming. If you decide that the type of round you have ordered to be loaded is inappropriate, you can change your mind up to the point where the round is actually chambered. Once an ammunition type has been loaded you will have to fire the cannon to load another type.

Your Loader will automatically load the weapon with the previous ammunition type unless ordered otherwise, or unless there is no more of that type. If you have chosen Auto Round Select mode from the Game Settings menu, the loader will choose an appropriate ammunition type based on the current target, or the last target if no target is currently selected. If Auto Round Select is disabled, the gunner will not load anything if he is out of the selected ammo type available. You will have to specify what type of round you want in the cannon. When the cannon is ready you'll hear the Loader tell you what kind of round is "up" (loaded), and a small red square will appear at the bottom of the GPS. If the red square is solid, it means there is a friendly in the sight.

FIRING THE GUNS

Fire the cannon (or .50 Caliber machine gun depending on which station you occupy) by pressing the Trigger (button 1) on your joystick or the SPACE BAR on your keyboard. Fire the Coaxial machine gun by pressing the C key or joystick button 3.

You do not need to have a target to fire a weapon, so be careful with that trigger! A friendly or neutral vehicle could come between you and your target just as you fire. It is possible to destroy friendly objects in Armored Fist 3, even members of your own platoon.

AMMUNITION SELECTION

The M1A2 has four different ammunition types for its 120mm cannon, a commander's and a gunner's machine gun, and two ways of creating defensive smoke. Selecting the appropriate weapon and ammunition for a given target is a critical combat decision. Choosing the wrong ammunition for a target means that you have wasted a round that could have been used to eliminate another, more appropriate, target. It also means that you have wasted time, and while your crew is desperately trying to get the proper ammo loaded, the target you failed to destroy with the first round is probably drawing a bead on you.

THE 120MM CANNON

The M1A2's primary weapon is a 120mm smooth bore cannon. Use this weapon against armored vehicles, bunkers, and other hard targets. The fourth crew member, the Loader, will load the selected ammunition type into the cannon. It takes him several seconds to safely do this. When the cannon is ready, the loader will announce the ammunition type is "up" (loaded), and a small red square will appear on the bottom of the GPS. If the red square is solid, it means there is a friendly in the sight.

The 120mm cannon can fire a variety of ammunition types:

SABOT Cannon Round (5 key) — The APFSDS (Armor Piercing Fin Stabilized Discarding Sabot) is your best weapon against enemy tanks. The SABOT round features a very hard, very dense long rod penetrator composed of depleted uranium. It has an extremely high muzzle velocity and is capable of defeating any current armor.

HEAT Cannon Round (6 key) — The High Explosive Anti-Tank, or HEAT, round is highly effective against armored vehicles bunkers, guard towers and other structures. Its shaped-charge warhead can blast through even the thickest metal armor. However, this ammunition is less effective against vehicles with modern composite armors, such as the Russian T-80 Tank.
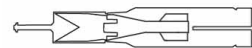
MPAT Cannon Round (6 key) — Some missions will substitute your HEAT loadout, with MPAT rounds. The MPAT, or MultiPurpose Anti-Tank, is a HEAT round coupled with a proximity warhead. Highly effective against aircraft such as helicopters, the MPAT will detonate when it is near its target.
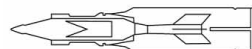
STAFF Cannon Round (7 key) — Most effective against targets hidden behind terrain, the STAFF (Smart Target-Activated-Fire-and-Forget) is designed to fly over its target and fire an explosively-formed penetrator downward. Helicopters are particularly susceptible to the STAFF round since the explosive penetrator can affect them without the round actually having to strike the body of the aircraft.

NOTE: Once ammunition is loaded, there is only one way to clear the chamber to load a different type; it must be fired. Removing an unfired round from the breech is considered to dangerous and time-consuming.

MACHINE GUNS

The machine guns mounted on the M1A2 provide an inexpensive and effective form of firepower, useful against unarmored or lightly armored targets. Machine guns can also fire while the cannon is being reloaded. Save your Cannon rounds by using the machine guns against any target they can destroy.

Tank Commander's .50 Caliber Machine Gun – This heavy machine gun is mounted on the Tank Commander's hatch atop the turret. It is the selected machine gun when you are in the Tank Commander's Unbuttoned view, or in Chase views when the commander is exposed. The .50 caliber is effective against buildings and trucks, but its most important use is as an anti-aircraft weapon. The .50 Cal holds 900 rounds of ammunition.

Coaxial 7.62mm Machine Gun – The coaxial machine gun is mounted in the front of the turret, next to the 120mm cannon. The Gunner uses this light machine gun to attack unarmored or lightly armored targets. The coaxial always points in the same direction as the cannon. Fire it with the C key, or select it on the Ammunition Selection Panel in the Gunner's station and use the trigger button or the SPACE BAR. The 7.62mm is a lighter weapon than the .50 caliber, but it is useful against most of the same targets. The Coaxial machine gun holds 10,000 rounds of ammunition.

SMOKE

The M1A2 can generate a defensive smoke screen, which will interfere with the enemy's target acquisition capabilities (and your own). There are twelve smoke grenade launchers, six on each side of the turret. The launchers place smoke in a 120-180 degree arc in front of the turret. Press the O (zero) key on the keyboard to launch smoke grenades. You have two salvos available at the start of each mission. The tank can also inject raw fuel into its engine exhaust manifold, creating a dense cloud of smoke at the rear of the vehicle. Press the E key to toggle this source of smoke on and off.

S. Austin :I HAVE EYES ON TANKS

Eliminator	Speed:045mph
Objectives:020	Heading:258
Enmy T80	G:0947 0811
Sabot 020	00:59:32

WARNING!
Hot oil and coolant can burn you. Turn radiator cap slowly to let out pressure.

AIR AND ARTILLERY SUPPORT

Armored Fist 3 provides your tank force with additional firepower in the form of Air Support and Artillery. They can soften up an enemy position in preparation for your assault, and can be of significant help in defeating large enemy forces. If the mission you are fighting offers air or artillery support, use it.

Call in Air Support with the 8 key, and Artillery Bombardments with 9 key. You will receive radio messages in response to support requests. Check the Mission Briefing at the beginning of each battle to see if air or artillery support is available.

Supporting artillery targets the location at which your cannon is pointed, so you can use the AutoLock feature by pressing Button 2 or ENTER, or use the Gunner's Primary or Auxiliary Sight to select the place you want the rounds to fall. If you have a target locked, that will be the aim point for the artillery strike. Be careful! Artillery, friendly or enemy, is perfectly capable of destroying your tank, so when you make an artillery request, first be sure that the 120mm cannon is pointing to where you want the rounds to strike. If you call in artillery to a spot too near your own location the other members of your platoon will clear the area in preparation for the strike. Once requested, an artillery strike cannot be recalled.

Successful requests for air support will bring either an A-10 "Warthog" ground-support aircraft or Apache helicopters to your aid. The aircraft patrol around your unit, searching for enemy targets. If you move, the aircraft move with you, giving you continuous aircover. One of the most useful features of air support is that an aircraft high in the sky can see much further than a tank down on the ground. Aircraft that spot enemy units will report them to headquarters, which will immediately download the data to your IVIS.

WARNING!
Squad seat is heavy and will fall when latch is released. Hold seat when releasing latch.

Artillery strikes are best used against targets that are not moving, or against areas that an enemy force will have to move through. Airstrikes are best for seeking out fast-moving enemy vehicles, or for providing all-around security for your force. Air and artillery support are available in multiplayer Cooperative or Red on Blue missions, but not in Deathmatch scenarios.

MINES

The enemy may have scattered mines around many of the sites you will be ordered to seize, so you will need to stay alert for their presence. You may also find mines laid on the avenues of approach to a target location. Once detected by a friendly unit they will show up as clusters of small red squares in your IVIS map. However, until they are spotted and entered into the IVIS, mines are invisible. You may on occasion get warning messages about mines, indicating the general areas to watch out for. Mines will damage the tank's tracks. You can use an artillery bombardment to take out a minefield, if you know where it is.

M1 A2

Chapter 10: Gunner Station (F2 key)

Though visibility from the Gunner's position is limited to what can be seen in the gunsights, this is a good location to access information about your weapons and your current target. Access the Gunner's Position via the 'F2' key.

The Gunner's Primary Sight (GPS) in the M1A2 is a technological achievement, and is the Gunner's main viewing and targeting tool. It is mounted on top of the turret, at the right front. This crew position also has a Gunner's Auxiliary Sight (GAS). The auxiliary sight is a boresight, a look straight along the barrel of the cannon, which can be a very useful device. The Gunner can also choose ammunition for the cannon or select the coaxial machine gun.

The gunner uses the buttons on the Ammunition Selection Panel to inform the loader which ammunition to load next. Use the Air/Ground button for a more precise detonation of the MPAT warhead against air or ground targets respectively. Just below the Ammunition Panel is a slide selector for the level of magnification of the GPS. The gunner can select to fire the coaxial machine gun instead of the cannon by selecting the switch to the right of the Ammunition Panel.
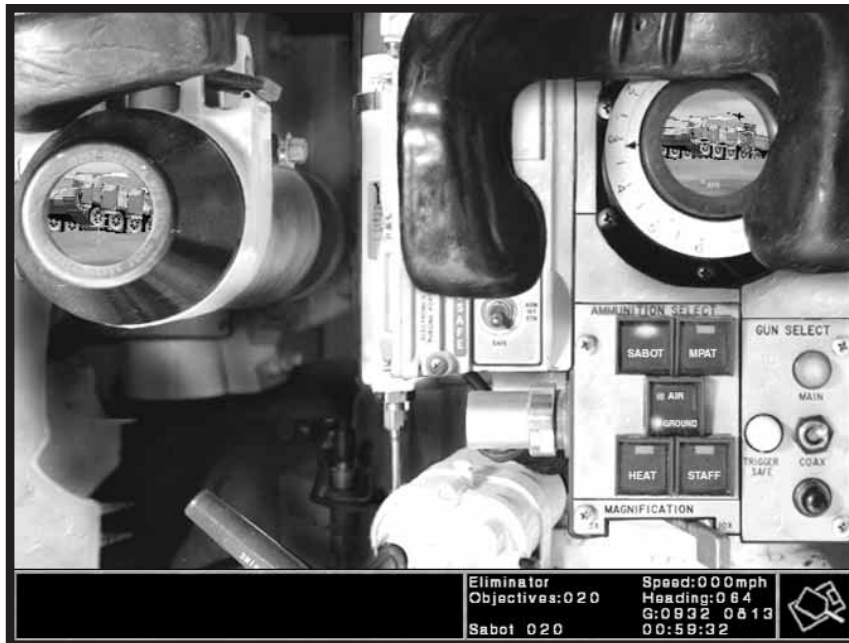
The center of the GPS has a targeting reticle to help you place your rounds accurately and effectively. In the 3x magnification mode this reticle appears as the four corners of a rectangle, framing the middle of the GPS screen. If a target has been selected the reticle around it will appear red. If there is no lock on a target the reticle will be green. In the 10x view the graphic is a little more complex, to allow finer control over where the gun is aimed, but it serves the same function and changes color in a similar fashion to the 3x reticle.

THE GUNNER'S PRIMARY SIGHT (F3 KEY)

The GPS has a number of digital enhancements to the sight, which provide important information about the gun, its ammunition status, and the current target. At the top of the sight the GPS provides information about the cannon's ammunition status. If a round is loaded, the type will be displayed in red. If the loader has not yet finished getting a round into the gun, the word "Loading" shows instead. If the tank is out of the selected ammunition type, the word "Out" appears.

In Easy mode, a large red "X" covering the reticle means that you have a friendly unit in your sights. You may also see that the small red "round up" box at the bottom of the GPS is solid rather than outlined.

The Gunner's location lets you take precise control over where the gun's rounds will strike. Place the targeting reticle in the GPS over the place you want the round to hit. If your round misses, use the reticle to determine how far and in what direction you will need to adjust your aim.

If you have selected a target, its range in meters appears in red numbers at the bottom of the GPS screen. The GPS also places a small red square in this area when the cannon has a round in the chamber. You will spend many anxious moments waiting for this square to appear! The GPS also displays a red "F" here on occasion. This indicates a "barrel fault." Nothing is wrong with the gun, but physical movement limitations prevent it from bearing on the targeted object. This most often occurs because the GPS has targeted something that is either too high or too low for the cannon's elevation system to reach. You may have to maneuver to bring the gun on to the target. Barrel faults will be reported by the crew, so you will have an audio clue that something is amiss.

WARNING!
Do not place any part of the body through the opening between driver's station and turret unless turret lock is locked and turret power is off.

THE GUNNER'S AUXILIARY SIGHT (F4 KEY)

The left-hand eyepiece looks directly along the barrel of the gun, so you can see exactly where the gun points. The boresight always shows a 10x view. The boresight can be a very useful tool for sharpshooting, when the target is partially obscured by terrain or other vehicles. The GAS reticule is extremely useful in manually aiming the round. Point the targeting pip directly at your target, then raise the barrel to compensate for distance. When you have lined the bar that represents the distance to the target up with the actual target, you should have a precise shot. Use the fine controls (toggle with the F key) on the turret traverse and gun elevation to get the gun pointed just where you need it.

The boresight is also useful for positioning your tank in a hull-down position behind a hill, with just the armored front of your turret showing over the top. Depress the gun as far as you can, then slowly go straight up the side of the ridge. When you see sky in the boresight, you know that the gun barrel is pointing over the crest of the hill.

The GAS can be handy for times when the GPS is damaged. It may become the only method you have of aiming your cannon and coax machine gun.

WARNING!
If vehicle rolls forward or backward, soldiers can be injured or killed.

Chapter 11: Tank Commander Buttoned (F5 key)

In the Tank Commander's Buttoned view the perspective is from the commander's position inside the M1A2 turret. From here you have access to some powerful combat information devices, including the Commander's Independent Thermal Viewer (CITV). Enter the Commander's interior view via the Control Bar or by pressing the F5 key.

IVIS - On the right side of the Tank Commander's Buttoned position is the IVIS map, displaying a wide variety of information about the local combat situation.

CITV - The CITV is in the middle of the Commander's Buttoned position screen. The CITV is a viewing and targeting device, with thermal capabilities. The thermal viewing modes use the differences in the heat levels of objects to display targets in low light conditions, such as darkness or smoke.

3x/10x - This button will switch the magnification on the CITV between 3x and 10x.

POLARITY - Use this button to switch the polarity of the thermal viewer.

CITV POWER - This switch will turn the CITV display on and off.

TRGT LOCK - Use this button to establish a target lock with the CITV.

HAND OFF - This button hands off the target to the gunner, who will aim and fire at it when the cannon is ready.

CITV/GPS - Pressing this button will lock the CITV alignment to the Gunner's Primary Sight. Pressing it again will allow it to move independently of the GPS.

GUN LOS - The button automatically aligns the CITV with the Gunner's Primary Sight.

CITV ADJ - Use these buttons to move the CITV view around.

GPS - The tank commander can see exactly what the gunner sees by looking through the secondary GPS.

S. Austin :I HAVE EYES ON TANKS

Eliminator Speed:045mph
Objectives:020 Heading:258
Enmy T80 G:0947 0811
Sabot 020 00:59:32

CITV (F6 KEY)

Click on the CITV or press the F6 key to get a close up version of the Commander's Independent Thermal Viewer. Use the CITV to search for targets, to scan the flanks of a route while moving, or to hunt for enemies sneaking up on a tank while its crew is engaged with another target.

In the Abrams the Commander and the Gunner can act as a hunter-killer team. The Commander is the hunter, using the independent viewing capabilities of the CITV to locate targets. When the CITV shows an enemy the Commander can select and identify it by pressing Button 2 or ENTER, and hand it over to the Gunner by pressing the trigger or the SPACE BAR.

The Gunner is the killer, traversing the turret to the elevation and deflection specified by the CITV and engaging the enemy force in that direction. The Gunner will immediately engage a target handed over by the Tank Commander. You may want to wait until the current target is destroyed before handing a new one off, unless you consider the new target to be a more immediate threat. Once you have handed a target off you can go searching for a new threat.

S. Austin :I HAVE EYES ON TANKS

Eliminator	Speed:045mph
Objectives:020	Heading:258
Enmy T80	G:0947 0811
Sabot 020	00:59:32
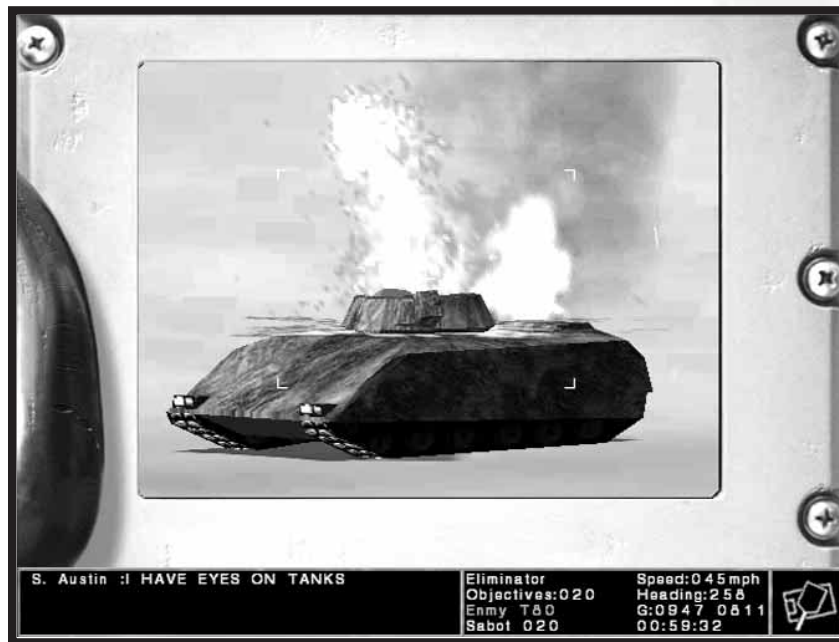
WARNING!
Vehicle could sink or swamp. Soldiers could drown or be injured.

Chapter 12: Inter-Vehicular Information System (IVIS) (F7 key)

It has been said that, while the M1A1 tank was ten percent digital and ninety percent analog, the M1A2 is ninety percent digital and only ten percent analog. A large part of the digital addition to the capabilities of the M1A2 comes from the IVIS, one of the most sophisticated digital location and communications device ever installed in a combat vehicle.

The IVIS is the tank's primary battlefield monitor, giving the crew a detailed overview of the terrain and showing the locations of all friendly forces. It also allows headquarters to download to the tank the locations of all enemy and neutral forces that have been spotted by any other friendly source, including other units, air reconnaissance, or even satellites.

The IVIS gives the tank commander important mission planning and control tools. A tank commander can examine the terrain in which the tank must operate, and then set a route for the unit to follow in pursuit of its mission objectives. In the main IVIS North is always at the top of the screen. In the IVIS Map, higher elevations appear in progressively lighter shades of green. Friendly objects and vehicles are blue, neutral objects appear gray, and enemies show up as red. Destroyed vehicles and structures are black. Yellow outlined objects are mission goals.

WAYPOINTS

Waypoints mark locations through which your force can move in pursuit of its mission objectives. Most missions in AF3 start with waypoints already set. Waypoints appear as colored decimal numbers either yellow or green, with a line extending to the ground below. The number is the distance to the waypoint in kilometers. The yellow element is the next destination, and the green element the one after that. When you get close enough to a yellow waypoint, it will disappear, and the next waypoint will turn yellow. If there is a waypoint after that, it will be colored green. At the top of all the view screens there is a ^ (caret) marker, pointing to the location of the next waypoint, in case it is not visible from the direction you are facing.

Sometimes it will appear that a green waypoint element is closer to the tank than the yellow one. This could be the case, if your force was going to turn around at the next waypoint and come back the way it came. However, it is more likely that the line that extends from a waypoint is actually pointing to a ground location behind a hill or other terrain feature. If you climb the hill you will be able to see the waypoint marker pointing to its proper location.

IVIS CONTROLS

The IVIS provides a set of common data elements at the top of each screen, including the current platoon number, the tank ID and commander, the map grid coordinates, and the tank's present heading and speed. To the right it displays the time remaining in the mission.

At the bottom of the IVIS there is a set of control boxes. Use the mouse to make your selections. The IVIS controls give you access to all the IVIS functions, including setting Waypoints and selecting the platoon to which they will apply.

`Zoom Out` — Use this selection to give you a larger view of the map.

`Zoom In` — Click here to see specific section of the map in more detail.

`Platoon` — Use this to select your next platoon (if you command multiple platoons).

`Center` — Click here to center the current platoon on the map.

`Clear Waypts` — This control box will clear all the waypoints for the currently selected platoon.

`Add Waypts` — Clicking on this control box lets you set new waypoints for the current platoon. Once you have selected this control, left-click anywhere on the map to place a new waypoint. Right-click to end setting waypoints.

You can scroll the IVIS display with either the mouse or the arrow keys. Press the left mouse button when the cursor is at the edge of the map display and the map will scroll in that direction, or press an arrow key to have the map scroll in the direction of the arrow.

IVIS SYMBOLOGY

Ammo Dump	Fuel Point	Structure
Anti-Air	Headquarters	Tank Trap
APC Platoon	Mechanized Infantry	Tank, leader
APC, leader	Mechanized Infantry Commander	Tank, platoon
APC, single	Medical Unit	Tank, single
Artillery	Minefield	Truck
Bunker	Rotary Aircraft	Waypoint
Convoy	Scud	
Fixed Wing Aircraft	Signal Unit	

13: Tank Commander Unbuttoned (.50 cal) (F8 key)

Your Tank Commander's Unbuttoned view, with the hatch open and your head outside the tank, offers a panoramic view of the terrain around the tank. Tank commanders prefer to stay unbuttoned as long as they are not under direct fire, because of the superior situational awareness offered from this perspective.

Access the Unbuttoned view by pressing F8. As in the Chase View, you can perform all basic M1A2 operations from the Unbuttoned position with keyboard commands, and you have GPS and Tactical Map monitors available. Whenever you get a target lock with the .50 caliber machine gun, a lock screen will appear in the lower left-hand corner.

Your primary job in the Tank Commander's Unbuttoned position is spotting enemy forces. You can then drop to the CITV or to the Gunner's position to target what you have spotted. You also have responsibility for attacking targets, especially aircraft, with the .50 caliber.

54

Chapter 14: Driver (F9 key)

Driver's Vision Block – The driver steers the tank using this protected view. It is capable of thermal vision for night driving (the ; key). A red caret ^ at the top of this view shows the direction to the next waypoint.

Speedometer – The tank's current rate of advance in miles per hour is shown on this dial.

Engine Smoke – The driver has the ability to have the engines to produce thick smoke for additional rear defense with this button.

Damage/Threat Display – When your M1A2 is hit by an enemy weapon or runs over a mine, there is a good chance that it will be damaged rather than destroyed. Damaged systems will no longer operate, or will operate less effectively. The Damage Display shows you if any vital components of the vehicle have been hit. If the tank is damaged, the appropriate area will turn red and flash on and off. The tank may suffer damage to its Tracks, the Engine, the Thermal Viewer (CITV), or the Gunner's Primary Sight (GPS). With Advanced Damage turned on from the Settings menu, any damage you suffer in a mission will be permanent. This display also features a threat warning system, shown as a broken circle around the Damage Display. The circle elements flash red if enemy rounds strike the tank from that direction. This display shows you which direction an attack is coming from so you can evade or counter attack.

Damaged systems flash red. The following M1A2 components can suffer damage:

Engine–   If the engine is damaged you will be unable to move until the damage is repaired.

Tracks–   Damage to one of your tracks will keep you from being able to move except in a circle. Damage to both tracks will immobilize the tank.

CITV–   If your CITV suffers damage it will no longer operate.

GPS–   Damage to the GPS renders it useless until repaired.

In Easy Mode, most damage will be repaired as you play.

CHAPTER 15: Tactical Map (F10 key)

By pressing the F10 key, you will be able to see a high elevation view of the battlefield to help you make tactical decisions. The map clearly displays the position of all sighted units in addition to topographical details of the region. With this map you can plan out the best route to take in accordance with the given terrain. Use the keypad PLUS and MINUS keys to zoom in and out of this map.

MAP OVERLAY (F11 KEY)

On certain screens, you can bring up a small map overlay in the corner of the screen. This can help you get your bearings on the field and locate sighted units. Press the F11 key to bring up this overlay. Pressing the F12 key will toggle between this mode and the GPS mode.

GPS OVERLAY (F11 KEY)

When activated, this key will put up a small overlay of the Gunner's Primary Sight to assist you in seeing what the gunner sees during combat. Refer to the Page 47 for more information on the GPS view.

Chapter 16: Commanding Multiple Tanks

Most missions will require that you command a force of between four and twenty-four M1A2 Main Battle Tanks. A Tank Platoon consists of four tanks with one of them being the Platoon Leader. You will have the ability to control each platoon as well as every tank within the platoon individually. Coordinating all of these tanks will not be an easy task, but it is vital for your success in Armored Fist 3.

SWITCHING TANKS

Similar to switching stations within a tank, you can immediately switch to controlling another tank under your command by pressing the TAB key. This will bring up a list of tanks for you to choose from. An arrow indicates the leader of each platoon. Use the ARROW keys to select the tank that you would like to switch to and hit ENTER. The bottom of this screen displays specific information about the selected tank. This includes its damage status, grid location, remaining cannon ammunition and current platoon formation.

COMMANDING A PLATOON

With the O key or the quick formation keys (V,B,N,M,<,>) you can set the formation orders for the entire platoon. All tanks in the platoon will match their movements to the platoon leader's tank when instructed. You may switch to and command any tank in the platoon, but the other tanks will only follow you when you are in the platoon leader's tank. If the platoon leaders tank is destroyed, another tank will assume the role of platoon leader (indicated by the arrow beside the tanks' ID).

Use the ARROW keys to scroll through the platoon orders menu. Press the ENTER key to give the selected order. When you are done with the platoon orders menu press ESCAPE to close it. Here is a description of what each order means:

MOVEMENT

– Normal – Unless under direct control of the player, the platoon leader will follow its waypoints when "Normal" is selected. The other tanks in the platoon will follow the leader in the assigned formation, spacing and engagement orders. The default movement type is normal.

– Halt – Units ordered to halt will no longer move unless you take manual control or unless you have called in an artillery strike too dose to the unit. Once you have halted a tank, it will stay where you left it. Units given the "Halt" order will continue to target enemy vehides as listed in their engagement orders.

– Retreat – Units ordered to "Retreat" will try to break contact with the last enemy unit that fired on them and move directly away from the area of combat as quickly as possible. If the platoon leader's tank is nearby they will reform on it. Retreating units will continue to target and engage enemy forces as per their engagement orders.

– Road March – Units will follow waypoints without deviation. They will engage enemy units, when sighted, but they will not leave formation and will stay in course to their next waypoint.

– Patrol – Units will follow waypoints, engaging enemies when encountered, but not straying far from the waypoint route.

– Advance to Contact – Units will follow the waypoint route, unless enemy units are sighted. They will engage and pursue enemies as encountered.

WARNING!
The turret can crush you as it turns. Do not enter or exit turret when turret power is on.

FORMATION

— Wedge — Platoons use the Wedge formation to cross unfamiliar territory or when the location of enemy forces is unknown. The wedge is a cross between the diamond and line formations. Unlike the diamond, the wedge formation contains no ready reserve. It commits all four of its vehicles to specific positions within the formation. The only difference between the wedge and the line is the fact that the wings of the formation are bent back toward the middle. Both formations offer good visibility and clear fields of fire to the front, but the wedge exposes only the lead vehicle to initial enemy fire.
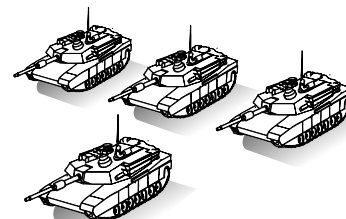
— Line — A platoon will typically adopt a Line formation in situations that require the full firepower of the platoon be brought to bear on a common target area. To assume a line formation, the platoon assembles its vehicles side by side in a line. The line formation affords the platoon excellent visibility to the front but leaves the flanks vulnerable. For this reason, the platoon leader should make every effort to determine the general location of enemy forces before assuming this formation. Though difficult to maintain for long distances, the line formation is excellent for short rushes. The M1A2's ability to shoot on the move allows the platoon to charge while keeping the enemy under fire. One negative aspect of the line formation is the fact that all four of the platoon's vehicles are exposed to enemy view. A platoon in this formation has no reserve element to call upon since all elements are in immediate contact with the enemy.
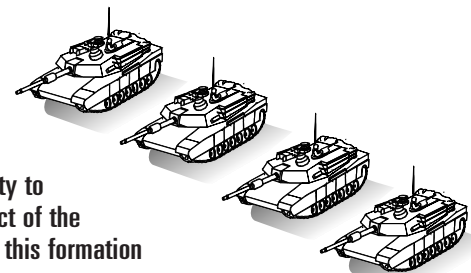
— Column — The column is not a combat formation. A tank platoon normally assumes a Column formation when speed is important and security is not a concern. Command and control problems in this type of formation are minimal, since all four of the platoon's tanks line up one behind another. A tank platoon routinely travels in column in order to take advantage of a local road network. Not only does this increase the speed of the move, it reduces the wear and tear associated with off-road movement. A platoon will also use this formation when it must negotiate restrictive terrain, like forests, fording sites, or mountain passes. The platoon's orientation limits its frontal visibility and firepower. In a column formation, only the lead tank has a completely unobstructed view of the battlefield ahead. By entering combat in column formation, you effectively reduce your frontal firepower by 75%.
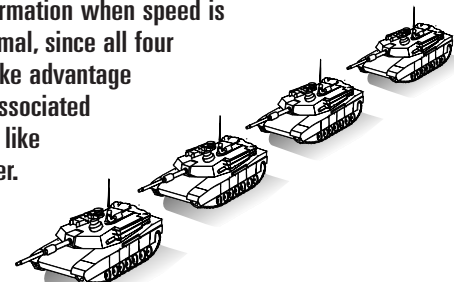
— `Refuse Right/Left` — A platoon will normally "Refuse" (bend back) one flank of a Line formation when it must provide a security screen for a larger organization. A refused flank gives a platoon most of the movement benefits of the column while allowing vehicles in the rear of the formation a limited forward field of fire. Also called an Echelon, a formation with one flank refused maximizes firepower to the sides. The spacing between tanks depends on the terrain and on the requirements of the mission. The platoon leader occupies the lead position in the formation. The remaining three tanks deploy behind and on an angle from the platoon leader's "8 o'clock" or "4 o'clock" position. The Refused formations should be used to screen a larger organization when contact with enemy forces is expected. It can be a difficult formation to maintain, especially in close terrain with limited line of sight.
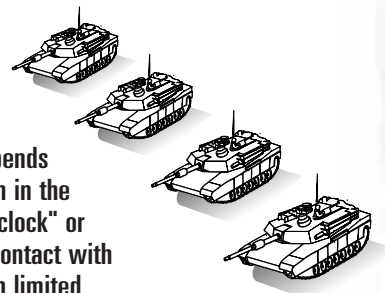
— `Diamond` — A tank platoon assumes the "Diamond" formation when traversing unfamiliar territory and when a 360-degree field of fire is required. The diamond provides the platoon with greater security than most other formations, while enabling it to continue moving at a high rate of speed. When deployed in a diamond formation, the platoon advances with a single tank acting as a "point" vehicle. Two tanks take drop-back positions on both sides of the leader, while the fourth tank is in reserve, bringing up the rear. This provides the platoon leader with a measure of flexibility. The commander can move the reserve tank to either side of the formation, depending upon the tactical circumstances.
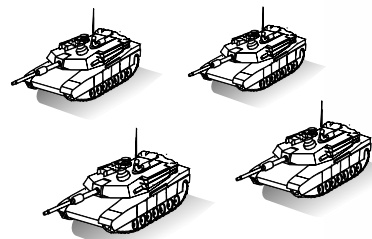
SPACING

– Close Up Spacing – This order makes the platoon stick tight together in the assigned formation. The advantage of this is that all of the tanks in the platoon will be more likely to engage the same targets. This is the best spacing for traversing a narrow valley as it keeps your outside tanks from exposing themselves on the valley ridges.

– Normal Spacing – Normal spacing will spread the platoon out more, giving the unit the ability to cover more terrain and reducing its vulnerability to air and artillery strikes.

ENGAGEMENT ORDERS

– Fire at Will – With this order, tanks in a platoon will choose their own targets based on their individually set targeting mode (refer to page 40). This is the default engagement order.

– Fire on My Target – Any tank ordered to "Fire on My Target" will attempt to engage whatever enemy you are currently targeting as the platoon commander. If the tank does not have line of sight on your target, it will select and engage its own targets as per "Fire at Will". This is the best way to quickly take out targets that you want to prioritize.

WARNING!
Battery posts and cables touched by metal objects can short circuit and burn you.

Chapter 17: Tactics

Firepower and mobility are the two most important factors for you to manage as a tank commander. This section will give you some insight on the tactics used by tank commanders in the field.

THE TANK PLATOON

According to the United States Army's Field Manual FM 17-15, the mission of the M1A2 tank platoon is to "close with and destroy the enemy. The platoon's ability to move, shoot, communicate, and provide armored protection is a decisive factor on the modern battlefield. The tank platoon can survive and win in battle, however, only if it is well trained, effectively led, and highly motivated."

An Armored Fist 3 tank platoon consists of four M1A2 Abrams tanks, each with a crew of four: a driver, gunner, loader, and tank commander. This gives the tank platoon a strength of 16 (fifteen enlisted personnel and one officer). The officer, normally a 1st or 2nd lieutenant, is responsible for the safety, security, and battlefield effectiveness of the entire platoon. The tank platoon is the basic building block of higher echelon armored units; therefore, the majority of your early Armored Fist 3 missions will cast you in the role of platoon leader. However, once you are comfortable with this level of command authority, more advanced Armored Fist 3 missions make it possible for you to command multiple platoons.

The company is the next level of military organization up from the platoon. A tank company consists of three tank platoons and a company headquarters. Although the tank company is organized and trained to fight as a separate, self-contained entity, it is not uncommon for it to be paired up with a company of mechanized infantry. This resultant combination accentuates the strengths of both formations.

The highest level of command authority in Armored Fist 3 is the battalion. A tank battalion typically consists of three tank companies, a headquarters platoon, plus assorted support platoons such as engineers, air defense, and self-propelled mortars. Most battalion commanders prefer to organize their units into combined arms teams by cross-attaching units with other battalions. For example, a mechanized infantry battalion might exchange one of its infantry companies for a tank company from a neighboring armor battalion. This way, battalion sized task forces can be tailored to perform a specific mission. (In Armored Fist 3, the mission designers have already optimized your forces for the task at hand.)

MOVEMENT TECHNIQUES

The Movement Techniques described in this section are based on actual battle tactics practiced by US tank platoon leaders. Movement techniques are specific "shoot and move" tactics that a platoon leader uses to move his forces from point to point on the battlefield. In the Army's FM 17-15, there are three elements to take into consideration when choosing a movement technique: "the likelihood of enemy contact, the availability of other elements to provide overwatch, and the terrain over which the platoons are moving." Essentially, movement techniques are variations on the "fire and movement" concept every soldier learns in basic training. The difference is that in this case they apply to platoons of vehicles rather than individual soldiers.

TRAVEL

Travel is a movement technique used when the risk of enemy contact is unlikely and speed is important. You will probably not use this method of movement very often in Armored Fist 3 because your forces usually start each mission in relative proximity to the enemy. Travel moves are normally administrative in nature and not associated with combat operations. Of the three movement techniques, travel is the fastest. Because enemy forces are not expected to interfere, security is considered irrelevant during a travel movement. All elements are kept continuously on the march (i.e., no elements are deployed to overwatch the move). Speed is a primary concern, so platoons stay in column and move using the local road network wherever possible.

TRAVELING OVERWATCH

Traveling Overwatch is a movement technique used when enemy contact is unlikely but possible. Basically, one platoon has the responsibility of providing security for the rest of a formation on the move. The designated platoon is referred to as the "overwatch" platoon because it must watch over friendly forces. When using this technique, the main body of the formation moves normally. The overwatching platoon, however, has a difficult task to perform. Its mission is to prevent the enemy from surprising the main formation of troops. To do this, it must move so that it keeps up, but it must also position itself so that it can provide suppressive fires if enemy forces appear.

In most cases vehicles belonging to the overwatch platoon act as outriders to the main body of troops. By stationing themselves on the flanks or in front of the formation, these vehicles can screen the larger unit and provide advance warning if they discover enemy forces nearby. This gives the main body time to disperse or assume a more combat ready configuration. Traveling overwatch combines the two basic principles of armored warfare: firepower and mobility. The main formation can continue moving, thus preserving its mobility. At the same time, the overwatching platoon retains its ability to provide direct fire on enemy positions at all times.

WARNING!
Hot coolant can burn you.
Turn radiator cap slowly
to let out pressure.

BOUNDING OVERWATCH

Bounding Overwatch is a movement technique used when the formation expects enemy contact. Although it is the slowest of the three types of movement, it is the technique you are most likely to use in Armored Fist 3. Bounding overwatch allows the formation to continue moving forward even when expecting enemy contact. There are two types of bounding overwatch: advance by alternate bounds or advance by successive bounds. You should base your selection of alternate or successive bounding on the predominate terrain in the area and the required speed of the advance. In both instances, the movement requires that the forces on hand be broken down into two separate sections or "teams." (A force of two platoons is ideal for employing bounding overwatch tactics.)

Alternate Bounds — When advancing by Alternate Bounds, the two elements are, in effect, playing a game of "leap frog." The lead element bounds forward until it reaches a point of good cover and concealment. It takes up an overwatch position at this location where it can direct fire into the battlespace ahead. The trailing element now bounds past the leader, until it reaches its own cover and concealment Once the trailing element (now in the lead) assumes an overwatch position, the former leading element now bounds forward. Notice that while the two elements are bounding, only one is moving at any given time. The halted element is responsible for providing cover for the exposed moving element. Repeat the process as often as is necessary to get the formation to where it's going. It's tedious, but it's a safe method of advancing into hostile territory. At no time are both elements exposed to potential enemy fire.

Successive Bounds — When advancing by Successive Bounds, the trailing element moves up and stops at a position abreast of the leading element. Unlike the alternate bounds method, the trailing element never advances past the leader. The lead element always initiates the movement by making the first bound and overwatches the trailing element as it moves up. This method of advance is slower than alternate bounding but it is more secure. The bounds are generally shorter so both elements spend less time moving and exposed to enemy fire. Successive bounding is also easier to control. The lead element remains in command throughout the movement.

GENERAL COMBAT TACTICS

Your success as a platoon leader in Armored Fist 3 depends on your ability to get the most from your vehicles. This means maximizing both their inherent mobility and their devastating firepower. When used properly, the M1A2 tank platoon is perhaps the most destructive conventional piece of equipment in the Armys inventory, and it is unsurpassed in its ability to survive on the battlefield. Even so, the tank is not invincible. It has limitations, so this portion of your manual concludes with a summary of useful combat tactics designed to keep you and your crews alive and effective on the battlefield.

USE OF TERRAIN

The single most important piece of advice any young platoon leader needs to remember is to always use your surrounding terrain features. Take care when advancing out into the open and always use terrain to mask your movements where possible. Never crest a ridge; go around. Move quickly through open areas.

`Try to Get in the First Shot` — Studies show that the side that shoots first normally wins an engagement even if outnumbered. By shooting first, you eliminate a portion of the opposition before it has a chance to fire.

`Ammo Selection` — You do not have unlimited ammunition, so choose your weapons wisely. Never waste an anti-tank round when a burst of machine-gun fire will do. Never fire a specialized shell like a STAFF round when a target can be just as easily destroyed by sabot.

`Situational Awareness` — Be aware of what is going on around you at all times. Access the situation from as many vantage points as possible, and expect the unexpected.

`Shoot, Move, Communicate` — The M1A2 is the ultimate digitized fighting machine. Use its firepower and mobility to "shoot and move." Use its radio to communicate. Call in air strikes and artillery on hard to reach targets.

`Mass & Maneuver` — Never take the opposition head-on. Always seek to concentrate your strength against the enemy's weakness. Attack the enemy on his flanks or rear and use the element of surprise.

`Target Selection` — When confronted by an enemy combined arms force, shoot the tanks first. Target infantry fighting vehicles and armored personnel carriers only after you eliminate the tanks.

Glossary

AFV– Armored Fighting Vehicle.

Apache– American attack helicopter.

APC– Armored Personnel Carrier.

APDS– Armor Piercing Discarding Sabot ammunition.

AT– Anti-Tank.

BMP– A lightly armored tracked personnel carrier of the Russian military. Often armed with a turret mounted heavy machine gun or anti tank missiles. Basically an older version of the M3 Bradley.

Bounding Overwatch– The slowest movement technique where the lead element moves forward to a secure position and then overwatches the rear element, which in turn moves forward to the next overwatch point. Used when contact is expected and speed is not a factor.

BP– Battle Position.

BRDM– The Russian four-wheeled scout vehicle armed with light machine guns or anti tank missiles. They are common in any military that utilizes Russian equipment.

Buttoned up– Denotes that all external doors of the tank are sealed. Specifically, it refers to the Tank Commander being in the internal position.

CAS– Close Air Support.

CITV– Commander's Independent Thermal Viewer. Provides the commander with independent stabilized day and night vision with a 360-degree view and automatic target selection for the gunner's sight.

Chobham Armor– Most advanced form of composite armor composed of depleted uranium and steel. A highly effective countermeasure to HEAT ammunition.

Coax– Refers to coaxially mounted machine gun.

Composite Armor– Plating that contains steel and ceramics in order to counter HEAT ammunition.

CP– Command Post.

Cupola– Swivel mounted for the .50 caliber machine gun operated by the Tank Commander.

CVC– Combat Vehicle Crewman.

DA– United States Department of Army.

ESTAT– Equipment status report.

FA– Field Artillery.

FEBA– Forward Edge of the Battle Area.

GPS-LOS– Gunner's Primary Sight-Line of Sight, used by the gunner to direct the 120mm cannon. GPS is also the term for Global Positioning Satellite navigation system.

Heading– Direction on a compass where 0 equals North, 90 equals East, 180 equals South and 270 equals West.

HEAT– High Explosive Anti-Tank ammunition round primarily used.

Hind– Russian attack helicopter.

`IVIS`— Inter-Vehicular Information System; sophisticated digital location and communication device on the M1A2.

`KIA`— Killed In Action.

`LAW`— Light Anti-tank Weapon.

`LeClerc`— French made Main Battle Tank.

`M109A6 Paladin`— 155mm Self- Propelled Gun.

`M-3 Bradley`— Infantry Fighting Vehicle.

`MBT`— Main Battle Tank, such as the M1A2 Abrams.

`MG`— Machine Gun.

`MPAT`— Multi Purpose Anti-Tank ammunition. HEAT round with a proximity warhead.

`NBC`— Nuclear, Biological, Chemical threats.

`Olifant`— South African made Main Battle Tank.

`PSG`— Platoon Sergeant.

`Reactive Armor`— Plating meant to detonate explosive ammunition rounds before they are able to penetrate the vehicle's armor.

`ROE`— Rules of Engagement; dictates what combat options are authorized in a mission.

`S219`— 152mm Self Propelled Gun.

`Sabot`— Non-explosive ammunition designed to penetrate armor.

`SOP`— Standard Operating Procedures.

`STAFF`— Smart Target Acquisition, Fire & Forget. Special ammunition that fires an explosive penetrator down on its target. Used to defeat helicopters and terrain protected vehicles.

`T-72`— Russia made Battle Tank.

`T-80`— Russian made Main Battle Tank.

`TC`— Tank Commander.

`Traveling Overwatch`— A movement technique where the lead element moves continuously and the rear element moves at various speeds, periodically halting to overwatch the movement of the lead element. Used when contact with the enemy is possible but speed is required.

`Unbuttoned`— Secondary position for the Tank Commander at the machine gun station on the top of the tank. Gives the Tank Commander the best view of the surroundings.

`Waypoint`— A pre-assigned map coordinate for navigational reference during a mission.

`ZTS DANA`— 152mm Self Propelled Gun.

OPERATIONAL TERMS FOR VOICE TRANSMISSIONS

The following is a list of actual terms used by Tank Commanders to effectively communicate via radio transmissions. Refer to them as needed for Voice-Over-Net communication in multiplayer games.

`Assemble—` "Report to specified location."

`Bandit—` "Enemy aircraft."   Term followed by direction toward the bandit.

`Bead window—` "Radio check/vehicle status."

`Bent—` "Equipment inoperative." Followed by report of problem and location.

`Blitz—` "Move out now."

`Bogey—` "Unidentified aircraft." Term followed by direction toward the bogey.

`Break—` Indicates the separation of the text from other parts of the message.

`Candles—` "Artificial illumination."

`Chatter—` "Communications jamming."

`Dynamite—` "Aircraft are inbound or attacking locally."

`Established—` "Unit prepared to defend."

`Fix —` "Send me your location."

`Flash, flash, flash—` "Clear the net immediately, critical information follows."

`Gas, gas, gas—` "Chemical attack."

`Gear 1—` "Bounding overwatch." A movement technique.

`Gear 2—` "Traveling overwatch." A movement technique.

`Gear 3—` "Traveling." A movement technique.

`Geiger chase—` "Conduct radiological survey or monitoring."

`Geiger sweet—` "Area monitored or surveyed is clear of contamination."

`Guidons—` "Clear the net immediately for passage of critical orders."

`Hush 1—` "Free net. All FM and digital stations can transmit as necessary."

`Hush 2—` "Direct net. All FM and digital stations are allowed to transmit only when contacted by the platoon leader or higher headquarters."

`Hush 3—` "Radio listening silence. No FM traffic, digital transmissions only."

`Hush 4—` "Radio/digital silence. No transmissions of any type."

`Lookout—` "Aircraft are in the area but are not threatening."

`Lowsky—` "Turret-down position."

`November, November, November—`"Actual emergency, cease fire and/or freeze, stay on radio."

`Out—` Indicated end of transmission where acknowledgement is not required.

`Over—` Indicates end of transmission where a response is required.

`Racehorse—` "Displacement move is covered."

`Red—` "Enemy attack is imminent or in progress."

`Redcon 1 —` "Full alert, unit ready to move and fight."

`Redcon 2 —` "Full alert, unit ready to fight."

`Redcon 3 —` "Reduced alert."

`Redcon 4 —` "Minimum alert."

`Set —` "Completed bound and prepared to overwatch from present position."

`Sidecar —` "Displacement move is not covered."

`Snowman —` "No aircraft are posing a threat at this time."

`Status —` Informal commander's assessment.

`Switch —` "Change to alternate frequency." Followed by specific frequency.

`Thunder —` "Move immediately in the most expeditious manner."

`Tophat —` "Hull-down position."

`Weapons Free —` "Engage any aircraft not identified as friendly."

`Weapons Hold —` "Fire at aircraft only in self-defense."

`Weapons Tight —` "Engage only aircraft positively identified as enemy."

`White —` "Enemy direct fire contact not probable."

`Yellow —` "Enemy direct fire contact probable."

`Zap —` "Not recoverable, combat loss, destroyed, or maintenance deadlined."

Index

9763-1303